



SAN FRANCISCO PUBLIC LIBRARY



3 1223 04517 4845



Book No

ACCESSION

379.794 Sa 524 231

126329

NOT TO BE TAKEN FROM THE LIBRARY

# DOCUMENTS DEPARTMENT

## DOCUMENTS DEPARTMENT ERRATA

---

Insert in table of contents:

Report of Principal South Cosmopolitan Grammar School.....pp. 96-101

On page 102, instead of John Hamill, read William Hamill.

On page 284, instead of Emily F. Swan, read Emily F. Swain.

SAN FRANCISCO PUBLIC LIBRARY

AMERICAN LIBRARY ASSOCIATION



Book No.

ACCESSION

379.794 Sa 521 <sup>23</sup>

126329

NOT TO BE TAKEN FROM THE LIBRARY

Form No. 37-1500-3-21-18

 176



DOCUMENTS DEPARTMENT













DEPARTMENT OF PUBLIC SCHOOLS,  
CITY AND COUNTY OF SAN FRANCISCO.

---

TWENTY-FIFTH ANNUAL REPORT

OF THE

SUPERINTENDENT OF PUBLIC SCHOOLS

FOR THE

SCHOOL YEAR ENDING JUNE 30, 1878.



SAN FRANCISCO:

W. M. HINTON & CO., PRINTERS, 536 CLAY ST.

1878.

#379,794  
 Sa 52r <sup>25</sup>  
 126329

# MEMBERS OF THE BOARD OF EDUCATION, OFFICERS AND STANDING COMMITTEES, 1878.

PRESIDENT, - - - A. C. HIESTER.

## MEMBERS.

	OFFICE.	RESIDENCE.
A. C. HIESTER.....	327 Pine street.....	422 Seventh street.
JOS. S. BACON.....	316 California street, second floor..	1327 Leavenworth street.
JNO. BIRMINGHAM.....	10 Market street.....	611 Chestnut street.
JOS. CLEMENT.....	710 Washington street.....	526 Green street.
DR. H. M. FISKE.....	652 Market street.....	610 Leavenworth street.
JAS. A. LAVEN.....	30 Sacramento street.....	1009 Harrison street.
JOS. LEGGETT.....	605 Clay street, room 14.....	918 Dolores street.
J. J. MOUNTAIN.....	1110 Market street.....	228 McAllister street.
DR. A. A. O'NEIL.....	652 Washington street.....	301 Lombard street.
W. A. PHILLIPS.....	Cor. Steuart and Folsom streets...	312 Page street.
J. F. SULLIVAN.....	607 Kearny street.....	1597 Pacific avenue.
JNO. W. TAYLOR.....	501 Market street.....	1717 Clay street.

Superintendent of Common Schools....A. L. MANN.....New City Hall, third floor  
 Deputy Supt. of Common Schools.....DUDLEY C. STONE.....New City Hall, third floor  
 Secretary.....GEORGE BEANSTON.....New City Hall, third floor  
 Assistant Secretary.....CHAS. A. CLINTON.....New City Hall, third floor  
 Assistant Secretary.....GEORGE WADE.....New City Hall, third floor  
 Messenger.....C. P. WEBSTER.....New City Hall, third floor  
 Messenger.....GEORGE A. LOWNEY.....New City Hall, third floor

## STANDING COMMITTEES.

CLASSIFICATION—Leggett, Fiske, Taylor, Hiester, Mann.  
 RULES AND REGULATIONS—Bacon, Taylor, Birmingham.  
 FINANCE—Birmingham, Bacon, Laven.  
 FURNITURE AND SUPPLIES—Taylor, Clement, Phillips.  
 SALARIES—Clement, O'Neil, Fiske.  
 JUDICIARY—Sullivan, Laven, Mountain.  
 SCHOOL HOUSES AND SITES—Phillips, Leggett, Birmingham.  
 JANITORS—Laven, Sullivan, Taylor, Hiester, Mann.  
 PRINTING—Mountain, Phillips, Clement.  
 EVENING SCHOOLS—Sullivan, Leggett, Mountain.  
 CREDENTIALS AND QUALIFICATIONS OF TEACHERS—Fiske, Sullivan Bacon, Hiester, Mann.



## CONTENTS.

---

	PAGES.
PRESIDENT'S REPORT.....	1-3
SECRETARY'S REPORT (Statistics).....	4-34
SUPERINTENDENT'S REPORT.....	35-60
Legislation.....	35
Needs.....	36
Compulsory Law.....	38
Retrenchment.....	39
Salaries.....	41
Ungraded School.....	43
Promotions.....	43
Substitutes.....	45
Course of Study.....	47
Music and Drawing.....	50
Cosmopolitan Schools.....	53
High Schools.....	54
Mode of Appointing Teachers.....	56
DEPUTY SUPERINTENDENT'S REPORT.....	61-78
Free Text-Books.....	63
REPORT OF PRINCIPAL BOYS' HIGH SCHOOL.....	79-87
"        "        "        GIRLS'        "        "        .....	88-101
"        "        "        EVENING SCHOOL.....	102-114
"        "        "        UNGRADED SCHOOL.....	115-118
ANNUAL EXAMINATION.....	119-153
SEMI-ANNUAL        "        .....	154-175
ANNUAL                "        GIRLS' HIGH SCHOOL.....	176-205
"                "        BOYS'        "        "        .....	205-225
TEACHERS' EXAMINATIONS.....	225-249
LISTS OF GRADUATES, ETC.....	249-257
LISTS OF SCHOOLS AND TEACHERS.....	257-279



# REPORT

OF THE

## SUPERINTENDENT OF COMMON SCHOOLS

---

### PRESIDENT'S REPORT.

---

*To the Honorable the Board of Supervisors  
of the City and County of San Francisco:*

GENTLEMEN—The accompanying report of the Hon. A. L. Mann, Superintendent of Common Schools for the City and County of San Francisco, is so complete and exhaustive a treatise upon the condition of the School Department, at the close of the fiscal year, that I feel it would be a work of supererogation to add one word on the subject. The present Board of Education has labored faithfully to correct many errors of previous Boards and has spared no effort nor omitted any sacrifice to perfect the workings of the Department and to institute such improvements and reforms in the administration of the school funds as should do the greatest possible good, both to the pupils who are dependent on the schools and the taxpayers who sustain them. I agree with the accomplished Superintendent in his opinion that our schools are not perfect, and that many of our teachers might with

profit to the Department be required to give way to those better qualified; but it must be remembered that it is not an easy task to remedy these evils, and that no work of reform can be accomplished in a day. There are many reasons, not necessary to enumerate here, why the progressive ideas of which he speaks cannot be engrafted upon our present system. The present Board of Education came into office entirely new in their duties. But three members of the Board, and one of them the former President and a most worthy gentleman, had ever served in the Board; the majority had little more than the most superficial knowledge of educational matters. Yet in the brief time that has elapsed a number of most important reforms has been instituted, resulting in a vast increase of the efficiency of the schools and a saving of money to the treasury.

The Board has suffered some embarrassment in regard to its future plans by reason of the cutting down of its rather narrow estimate for the current year's expenses by at least \$100,000. I am still of opinion that to meet the increased wants and necessities of this growing city the original estimate for school expenses was not too high. Our population is gradually increasing, the average attendance in our schools is monthly growing greater and we are constantly feeling the need of more schoolhouses, more teachers and a general increase of educational facilities. All these things had been provided for in our estimates, and had this reduction not been made, much that now seems like extravagance and mismanagement would have been placed before the public in a different light. Notably is this the case in the matter of the purchase of certain school lots. These lots were purchased, as we supposed, in the exercise of the wisest economy. The money was in the treasury, likely if not used for that purpose to be conveyed into the General Fund with the close of the fiscal year. The Department was sadly in need of additional schoolhouses, and especially in that region where these lots were purchased—in the neighborhood of the New City Hall. When will property be cheaper in that neighborhood than it was when these purchases were made? We were already paying over \$4,000 a year rent in that section for school buildings. The object of the Board was to utilize its unexpended appropriation in the purchase of lots,



and this year, out of current appropriations, to erect buildings. The action of your Honorable Board in cutting down the estimates to the extent required for the construction of buildings has suspended our plans in that respect, but nevertheless the investment, we feel assured, will in any event prove advantageous to the city.

With respect to the financial condition of the Department, it is only necessary to refer you to the able and unequalled report of the Superintendent, in which it is embodied.

Very respectfully,

A. C. HIESTER,

President of the Board of Education.

SAN FRANCISCO, September 13, 1878.

## SUPERINTENDENT'S REPORT.

---

*To the Honorable the Board of Supervisors  
of the City and County of San Francisco:*

In accordance with law, I submit to you the following Report on the financial and educational condition of the School Department for the school and fiscal year ending June 30, 1878. I will first call your attention to the statistics compiled and arranged by the Secretary of the Board of Education.

---

### SECRETARY'S REPORT.

*To A. L. Mann, Superintendent of Common Schools:*

SIR—In compliance with your direction I submit the following Report:

#### GENERAL STATISTICS.

Population of the city (U. S. Census, 1870).....	150,005
Estimated population, 1878.....	308,215
Number of youth in the city under seventeen years of age, June 30, 1878.....	80,288
Increase for the year.....	43
Number of youth in the city between five and seventeen years of age who are entitled by law to draw public money.....	55,899
Increase for the year.....	2,689
Number of children between six and seventeen years of age who are entitled to attend the public schools.....	52,182
Increase for the year.....	2,778
Number of children between five and six years of age who will be entitled to attend the public schools during the next year.....	3,717
Decrease for the year.....	89

Whole number of different pupils enrolled during the year in all the public schools.....		38,672
Increase for the year.....	1,386	
Whole number of boys enrolled in all the public schools during the year.....		20,584
Increase during the year.....	643	
Whole number of girls enrolled in all the public schools during the year.....		18,088
Increase for the year.....	743	
Average number belonging to the public schools.....		26,932
Increase for the year.....	1,048	
Average daily attendance in all the public schools....		26,292
Increase for the year.....	1,393	
Average daily attendance of boys in all the public schools.....		13,407
Increase for the year.....	744	
Average daily attendance of girls in all the public schools.....		12,885
Increase for the year.....	649	
Number attending private and church schools during the year (not including Chinese), as reported by the Census Marshals in June, 1878.....		6,551
Decrease for the year.....	443	
Number of pupils attending public and private schools during the year (not including Chinese), as reported by the Census Marshals in June, 1878.....		39,678
Increase during the year.....	1,025	
Number of children between five and seventeen years of age (not including Chinese) who have not attended school at any time during the year, as reported by the Census Marshals in June, 1878.....		16,221
Increase during the year.....	1,664	
Average percentage of attendance of all the public schools .....		96.4
Percentage of pupils enrolled in the High Schools....		3.59
Percentage of pupils enrolled in the Grammar Grades..		25.56
Percentage of pupils enrolled in the Primary Grades..		70.85
Cost of instruction per pupil, based on the enrollment, and excluding expenditures for lots and buildings..		\$22 30
Average monthly salary paid to male teachers.....		159 32
Average monthly salary paid to female teachers.....		81 32

## SCHOOL ATTENDANCE.

Total enrollment in High Schools.....	1,219
Total enrollment in Grammar Schools, including some Primary Grades.....	14,448
Total enrollment in Primary Schools.....	19,406
Total enrollment in Evening Schools.....	3,599
Average number belonging to High Schools.....	1,008
Increase for the year.....	125
Average number belonging to Grammar Grades.....	7,058
Increase for the year.....	658
Average number belonging to Primary Grades.....	18,811
Increase for the year.....	1,195
Average number belonging to Evening Schools.....	1,176
Increase for the year.....	191
Average daily attendance in the High Schools.....	959
Increase for the year.....	118
Average daily attendance in the Grammar Grades.....	6,717
Increase for the year.....	630
Average daily attendance in the Primary Grades.....	17,506
Increase for the year.....	962
Average daily attendance in the Evening Schools.....	943
Increase for the year.....	150
Percentage of attendance in the High Schools.....	94.6
Percentage of attendance in the Grammar Grades.....	95.1
Percentage of attendance in the Primary Grades.....	93.0
Percentage of attendance in the Evening Schools.....	81.1
Average daily attendance per class in High Schools..	33.5
Average daily attendance per class in Grammar Grades.	41.0
Average daily attendance per class in Primary Grades.	50.5
Average daily attendance per class in Evening Schools.	24.4

## SCHOOL HOUSES.

Total number of school buildings used by the Department .....	61
Number of buildings for High Schools.....	3
Rooms, 33; Hall, 1.	
Number of buildings for Grammar Schools.....	15
Rooms, 230; Hall, 1.	
Number of buildings for Mixed (Grammar and Primary) Schools	7
Rooms, 28; Hall, 1.	
Number of buildings for Primary Schools.....	36
Rooms, 276; Hall, 1.	



# OF COMMON SCHOOLS.

7

Number of brick buildings owned by the Department.....	8
Number of wooden buildings owned by the Department.....	50
Number of rooms rented.....	17
Number of pupils taught in rented rooms.....	1,017
Amount paid for rent of rooms during the year.....	\$7,253 05

## SCHOOLS AND CLASSES.

Number of classes in the High Schools.....	27
Boys, 6; Girls, 21.	
Number of Grammar Classes.....	161
Number of Primary Classes.....	360
Number of Primary Classes taught in Grammar and Mixed Schools.....	110
Number of Grammar Classes taught in Primary and Mixed Schools.....	25
Number of Evening Classes... ..	33
Total number of classes in the Department.....	590

## TEACHERS.

Total number of teachers.....	672
Males, 74; Females, 598.	
Number of Principals.....	56
High Schools, 2; Grammar Schools, 15; Mixed Schools, 7; Primary Schools, 31; Evening School, 1.	
Number of Principals not required to teach a class.....	41
Males, 16; Females, 25.	
Number of Vice-Principals.....	22
Males, 8; Females, 14.	
Number of teachers in High Schools.....	34
Males, 12; Females, 22.	
Number of teachers in Grammar Schools.....	258
Males, 23; Females, 235.	
Number of teachers in Mixed Schools.....	28
Males, 8; Females, 20.	
Number of teachers in Primary Schools.....	302
Males, 0; Females, 302.	
Number of teachers in Evening Schools.....	37
Males, 25; Females, 12.	

Number of teachers of French .....	7
Number of teachers of German .....	14
Teacher of Latin and Greek .....	1
Number of special teachers .....	13
Music, 7; Drawing, 5; Military Drill, 1.	

## EXPENDITURES.

Total expenses for the year ending June 30, 1878 .....		\$989,258 99
Increase for the year .....	\$256,934 82	
Teachers' salaries .....		674,047 84
Increase for the year .....	74,659 08	
Janitors' salaries .....		40,025 63
Increase for the year .....	4,391 58	
Census Marshals .....		2,294 50
Increase for the year .....	530 50	
Water .....		125 00
Increase for the year .....	120 00	
School text-books .....		4,971 57
Increase for the year .....	713 21	
Stationery and school incidentals .....		21,097 18
Increase for the year .....	8,327 75	
Furniture .....		32,003 63
Increase for the year .....	12,718 36	
Fuel and lights .....		5,168 43
Decrease for the year .....	555 54	
Rents .....		7,253 05
Increase for the year .....	119 40	
Repairs and carpenter work .....		60,721 37
Increase for the year .....	23,422 04	
Incidentals .....		14,883 64
Increase for the year .....	8,015 29	
Erection of buildings .....		49,617 15
Purchase of lots .....		77,050 00

## SCHOOL REVENUE.

Valuation of city property for the year ending June 30, 1878 .....	\$254,702,960 00
Decrease for the year .....	\$5,874,018 00

Total amount of revenue for city purposes for the year ending June 30, 1878. ....	\$4,664,067 03
Decrease for the year. ....	\$1,264,304 46
Total income of the School Department for the year ending June 30, 1878, including cash on hand July 1, 1877. ....	1,017,209 83
Increase for the year. ....	74,593 67
State and city tax for 1877-78, on each hundred dollars. ....	\$1 $\frac{8.3}{100}$
City school tax on each hundred dollars. ....	16 $\frac{6.2}{100}$ cts.
Percentage of the total revenue of the School Department on the whole amount of revenue raised by the city for the year ending June 30, 1878. ....	21.8

## VALUE OF SCHOOL PROPERTY.

Estimated value of school sites, ....	\$1,630,000 00
Estimated value of school buildings, ....	875,000 00
Estimated value of school furniture. ....	170,000 00
Estimated value of school libraries. ....	12,000 00
Estimated value of school apparatus. ....	24,000 00
Total valuation of school property. ....	<u>\$2,711,000 00</u>

## SCHEDULE OF TEACHERS' SALARIES, 1877-78.

## HIGH SCHOOLS.

	PER MONTH.	PER ANNUM.
Principal Boys' High School .....	\$333 33	\$4,000 00
Principal Girls' High School .....	333 33	4,000 00
Special teacher of Latin and Greek, Boys' High .....	200 00	2,400 00
Special teacher of French and German, Boys' High .....	175 00	2,100 00
Special teacher of Natural Sciences, Boys' High .....	200 00	2,400 00
Special teacher of Mathematics, Boys' High .....	200 00	2,400 00
Assistants in Boys' High School .....	175 00	2,100 00
Assistants, Senior Classes, Girls' High School .....	150 00	1,800 00
Assistants, Middle Classes, Girls' High School .....	150 00	1,800 00
Assistants, Junior Classes, Girls' High School .....	125 00	1,500 00
Vice-Principals, Girls' High School .....	175 00	2,100 00
Special teacher of Natural Sciences, Girls' High .....	200 00	2,400 00
Special teacher of Normal Class, Girls' High .....	150 00	1,800 00
Special teacher of French and German, Girls' High .....	150 00	1,800 00

## GRAMMAR SCHOOLS.

	PER MONTH.	PER ANNUM.
Principals of Lincoln and South Cosmopolitan Grammar Schools .....	\$225 00	\$2,700 00
Principals of Denman, Rincon, Hayes Valley, Valencia, Eighth Street, Washington, Clement, North Cosmopolitan, Broadway, Union, Spring Valley, Geary and Mission Grammar Schools .....	200 00	2,400 00
Vice-Principals of said schools .....	150 00	1,800 00
Holders of First Grade Certificates, teaching Third and Fourth Grade Classes, exclusively for boys .....	75 00	900 00
Holders of First Grade Certificates, teaching other classes, Third and Fourth Grades .....	72 50	870 00
Holders of Second Grade Certificates, teaching Third and Fourth Grade Classes, exclusively for boys .....	72 50	870 00
Holders of Second Grade Certificates, teaching other classes, Third and Fourth Grades .....	70 00	840 00
Holders of First Grade Certificates, teaching Second Grade Classes of boys exclusively .....	85 00	1,020 00
Holders of First Grade Certificates, teaching other classes, Second Grades .....	77 50	930 00
Holders of First Grade Certificates, teaching First Grade Classes of boys exclusively .....	92 50	1,110 00
Holders of First Grade Certificates, teaching other classes, First Grades .....	85 00	1,020 00

NOTE.—Teachers of First or Second Grade Classes must be holders of First Grade Certificates, and teachers of Third or Fourth Grade Classes must be holders of First or Second Grade Certificates. No teachers shall be employed in Grammar Classes, except those who have had two years' experience in teaching.

## PRIMARY SCHOOLS.

	PER MONTH.	PER ANNUM.
Principals having eight classes or more.....	\$150 00	\$1,800 00
Principals having five classes and less than eight.....	125 00	1,500 00
Principals having four classes or less.....	100 00	1,200 00

## ASSISTANTS.

	PER MONTH.	PER ANNUM.
<p>Holders of Third Grade Certificates, who have had no experience in teaching:</p> <p>First year.....</p> <p>Second year.....</p> <p>Third year.....</p>	<p>\$50 00</p> <p>55 00</p> <p>60 00</p>	<p>\$600 00</p> <p>660 00</p> <p>720 00</p>
<p>Holders of Second Grade Certificates, who have had no experience in teaching:</p> <p>First year.....</p> <p>Second year.....</p> <p>Third year.....</p>	<p>\$55 00</p> <p>60 00</p> <p>65 00</p>	<p>\$660 00</p> <p>720 00</p> <p>780 00</p>
<p>Holders of First Grade Certificates, who have had no experience in teaching:</p> <p>First year.....</p> <p>Second year.....</p> <p>Third year.....</p>	<p>\$60 00</p> <p>65 00</p> <p>70 00</p>	<p>\$720 00</p> <p>780 00</p> <p>840 00</p>

NOTE.—Teachers who have taught two years in any public school in the United States will be credited with that experience on entering this Department, and will enter on the advanced salary according to Grade of Certificate. This schedule for the salaries of primary assistants shall apply to those teachers only whose salaries will thereby be increased, and to teachers hereafter to be elected; but it shall not apply so as to occasion the reduction of the salaries of any teachers heretofore elected.

## SPECIAL SCHOOLS.

	PER MONTH.	PER ANNUM.
Principal of Evening School.....	\$75 00	.....
Vice-Principal.....	65 00	.....
Assistants.....	50 00	.....
Principal—Ungraded School.....	100 00	\$1,200 00
Assistant—Ungraded School.....	90 00	1,080 00

## OUTSIDE AND UNCLASSIFIED SCHOOLS.

	PER MONTH.	PER ANNUM.
Principal of South San Francisco School.....	\$150 00	\$1,800 00
Principal of Potrero School.....	150 00	1,800 00
Principal of Fairmount School.....	150 00	1,800 00
Principal of Ocean House School.....	100 00	1,200 00
Principal of Point Lobos School.....	100 00	1,200 00
Principal of West End School.....	100 00	1,200 00
Principal of Laguna Honda School.....	100 00	1,200 00
Principal of Bernal Hights School.....	100 00	1,200 00
Principal of South End School.....	100 00	1,200 00
Principal of San Bruno School.....	100 00	1,200 00
Principal of Lobos Avenue School.....	100 00	1,200 00
Principal of Lombard Street School.....	100 00	1,200 00
Principal of Florida Street School.....	100 00	1,200 00

## SPECIAL TEACHERS OF LANGUAGES.

	PER MONTH.	PER ANNUM.
Holders of First Grade Certificates in German or French, teaching in Grammar Schools.....	\$100 00	\$1,200 00
Holders of First Grade Certificates in either German or French, teaching in Primary Schools.....	80 00	960 00
Holders of Second Grade Certificates in German or French.....	75 00	900 00
Holders of Third Grade Certificates in German or French.....	70 00	840 00
Assistants teaching English and German or French, extra.....	10 00	120 00

## TEACHERS OF MUSIC AND DRAWING.

	PER MONTH.	PER ANNUM.
Teachers of Drawing.....	\$150 00	\$1,800 00
Teachers of Music in Grammar Grades.....	150 00	1,800 00
Teachers of Music in Primary Grades.....	125 00	1,500 00

## GENERAL RULE OF INCREASE OF SALARIES ON ACCOUNT OF EXPERIENCE IN TEACHING IN THE PUBLIC SCHOOLS OF SAN FRANCISCO.

	PER MONTH.	PER ANNUM.
Increase at the end of four years.....	\$5 00	\$60 00
Increase at the end of seven years.....	7 50	90 00
Increase at the end of ten years.....	10 00	120 00

This shall apply to all assistants now elected, according to the time of their service.

COMPARATIVE EXPENSES OF THE PUBLIC SCHOOLS AND THE TOTAL  
EXPENSES OF THE CITY.

YEARS.	Total Expense of the City.	Total Expense of the School Department.	Per cent of Expen- diture for School Purposes.
1852.....		\$23,125 00	
1853.....		35,040 00	
1854.....		159,249 00	
1855.....		136,580 00	
1856.....		125,064 00	
1857.....		92,955 00	
1858.....		104,808 00	
1859.....		134,731 00	
1860.....	\$1,142,290 89	156,407 00	13
1861.....	826,012 33	158,855 00	19
1862.....	812,569 25	134,567 00	16
1863.....	1,387,806 12	178,929 00	13
1864.....	1,495,906 32	228,411 00	16
1865.....	1,819,078 52	346,862 00	19
1866.....	2,192,918 79	361,668 00	17
1867.....	2,163,356 02	507,822 00	23.4
1868.....	2,117,786 97	415,839 00	19.6
1869.....	2,294,810 05	400,842 00	17.4
1870.....	2,460,633 27	526,625 90	21.4
1871.....	2,543,717 15	705,116 00	27.7
1872.....	2,726,266 39	668,262 00	24.5
1873.....	3,155,015 99	611,818 00	19.4
1874.....	3,197,808 30	689,022 00	21.5
1875.....	4,109,457 65	707,445 36	17.2
1876.....	3,992,187 16	867,754 89	21.7
1877.....	3,500,100 00	732,324 17	20.9
1878.....	4,664,067 03	989,258 99	21.2
Total.....		\$10,199,381 31	



CENSUS REPORT FOR JUNE, 1878.

WARDS.	NATIVITY OF CHILDREN.			
	Foreign Born. ....			
	Native Born. Both Parents Foreign.			
	Native Born. One Parent Foreign.			
	Native Born. Native Parents. ....			
Blind children between 5 and 21 years .....	1	1		
Deaf and Dumb children between 5 and 21 years.	1			
Mongolians between 5 and 17 yrs. attending school.	...	...	...	...
Mongolians under 17 years of age. ....	31	...	...	...
Between 5 and 17 years who have not atten. school at any time during school year..	Indian.	...	...	...
	Negro.	...	...	...
Between 5 and 17 years who have attended Private Schools only during the year ....	White.	...	...	...
	Indian.	...	...	...
Between 5 and 17 years who have attended Public Schools during past year. ....	Negro.	...	...	...
	White.	...	...	...
Number of Children under 5 yrs. of age .....	Negro.	...	...	...
	White.	...	...	...
Indian Children bet. 5 and 17 yrs of age who live under guardianship of white per.	Total..	...	...	...
	Girls ..	...	...	...
	Boys ..	...	...	...
Number of Negro Children bet. 5 and 17 years of age .....	Total..	...	...	...
	Girls ..	...	...	...
	Boys ..	...	...	...
Number of White Children between 5 and 17 years of age .....	Total..	...	...	...
	Girls ..	...	...	...
	Boys ..	...	...	...
First.....	1378	1243	2616	118
Second.....	1911	1963	3874	115
Third.....	104	194	358	233
Fourth.....	1332	1417	2749	5662
Fifth.....	132	96	228	2801
Sixth.....	624	645	1269	23061
Seventh.....	940	950	1890	55662
Eighth.....	2142	2471	4613	2801
Ninth.....	2203	2310	4513	23061
Tenth.....	3475	3742	7217	55662
Eleventh.....	7952	7712	15664	2801
Twelfth.....	5353	5318	10671	23061
Total.....	27601	28061	55662	118



THE FOLLOWING IS A COMPARATIVE STATEMENT OF ALL THE CHILDREN IN  
THE CITY SINCE 1859.

Under eighteen years of age:

June, 1859 .....	13,858
“ 1860 .....	15,409
“ 1861 .....	20,933
“ 1862 .....	22,044
“ 1863 .....	25,952
“ 1864 .....	30,480
“ 1865 .....	32,529

Under fifteen years of age:

June, 1866 .....	30,675
“ 1867 .....	34,889
“ 1868 .....	39,728
“ 1869 .....	41,488
“ 1870 .....	45,249
“ 1871 .....	49,893
“ 1872 .....	52,587
“ 1873 .....	54,748

Under seventeen years of age:

June, 1874 .....	60,548
“ 1875 .....	64,908
“ 1876 .....	71,436
“ 1877 .....	80,245
“ 1878 .....	80,288

THE FOLLOWING IS A COMPARATIVE STATEMENT OF THE WHOLE NUMBER ENROLLED AND THE AVERAGE DAILY ATTENDANCE OF ALL THE PUBLIC SCHOOLS SINCE 1852.

	NUMBER ENROLLED.	AVERAGE DAILY ATTENDANCE.
During the year ending October 31, 1852.....	2,132	445
During the year ending October 31, 1853.....	2,870	703½
During the year ending October 31, 1854.....	4,199	1,011½
During the year ending October 31, 1855.....	4,694	1,484
During the year ending October 31, 1856.....	3,370	2,516
During the year ending October 31, 1857.....	4,637	2,155
During the year ending October 31, 1858.....	5,273	2,521
During the year ending October 31, 1859.....	6,001	2,829
During the year ending October 31, 1860.....	6,108	2,337
During the year ending October 31, 1861.....	6,674	3,377
During the year ending October 31, 1862.....	8,203	3,794
During the year ending October 31, 1863.....	8,979	4,389
During the year ending October 31, 1864.....	10,981	5,470
During the year ending October 31, 1865*.....		6,718
During the year ending June 30, 1866*.....		8,131
During the year ending June 30, 1867*.....		10,177
During the year ending June 30, 1868.....	17,426	11,871
During the year ending June 30, 1869.....	19,885	13,113
During the year ending June 30, 1870.....	22,152	15,394
During the year ending June 30, 1871.....	26,406	16,978
During the year ending June 30, 1872.....	27,664	18,272
During the year ending June 30, 1873.....	27,772	18,530
During the year ending June 30, 1874.....	29,449	19,434
During the year ending June 30, 1875.....	31,128	21,014
During the year ending June 30, 1876.....	34,029	22,761
During the year ending June 30, 1877.....	37,286	24,899
During the year ending June 30, 1878.....	38,672	26,292

\*No record kept of the number enrolled.

#### PERCENTAGE OF ATTENDANCE ON THE AVERAGE NUMBER BELONGING.

1860.....	.83	1870.....	.94
1861.....	.90	1871.....	.94
1862.....	.90	1872.....	.94.2
1863.....	.91	1873.....	.94.4
1864.....	.92	1874.....	.93.3
1865.....	.92.9	1875.....	.93.7
1866.....	.93.5	1876.....	.94.2
1867.....	.93.8	1877.....	.96.1
1868.....	.93¾	1878.....	.96.4
1869.....	.92.7		

REPORT OF THE RESULTS OF THE ANNUAL EXAMINATION OF  
THE SCHOOLS, MAY, 1878.

SCHOOLS.	FIRST GRADE.			SECOND GRADE.			THIRD GRADE.		
	No. Examined.....	No. Promoted.....	No. Failed.....	No. Examined.....	No. Promoted.....	No. Failed.....	No. Examined.....	No. Promoted.....	No. Failed.....
Denman Grammar.....	95	91	4	141	127	14	159	139	20
Lincoln Grammar.....	92	54	38	118	96	22	155	104	51
Rincon Grammar.....	60	52	8	74	55	19	109	87	22
Washington Grammar.....	39	13	26	39	30	9	51	32	19
Union Grammar.....	15	1	14	48	31	17	42	31	11
Broadway Grammar.....	36	25	11	33	20	13	71	62	9
Spring Valley Grammar.....	25	21	4	30	26	4	71	69	2
Hayes Valley Grammar.....	77	55	22	106	79	27	155	117	38
South Cosmopolitan Grammar.....	86	73	13	167	140	27	196	170	26
North Cosmopolitan Grammar.....	38	28	10	62	50	12	87	73	14
Valencia Street Grammar.....	75	45	30	121	91	30	138	124	14
Eighth Street Grammar.....	27	13	14	73	60	13	115	89	26
Mission Grammar.....	35	20	15	70	60	10	115	87	28
Geary Street Grammar.....	25	6	19	44	34	10	49	49	0
Clement Grammar.....	26	6	20	37	30	7	75	49	26
Bush Street Primary.....	.....	.....	.....	.....	.....	.....	60	58	2
South San Francisco.....	8	8	0	10	10	0	30	27	3
Potrero.....	.....	.....	.....	17	10	7	14	12	2
South Cosmopolitan Primary.....	.....	.....	.....	.....	.....	.....	75	63	12
Columbia Street Primary.....	.....	.....	.....	20	17	3	15	11	4
Lincoln Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Market Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Market and Seventh St. Prim.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mission Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tehama Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Broadway Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fourth Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Silver Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pine and Larkin St. Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greenwich Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hayes Valley Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shotwell Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eighth Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Powell Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tyler Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Spring Valley Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Turk Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West End.....	.....	.....	.....	.....	.....	.....	4	4	0
Fairmount.....	.....	.....	.....	3	3	0	19	18	1
Noe and Temple St. Primary.....	.....	.....	.....	.....	.....	.....	8	8	0
Ocean House.....	.....	.....	.....	6	5	1	3	2	1
Laguna Honda.....	1	0	1	.....	.....	.....	6	3	3
Jackson Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Castro Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Bruno.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South End.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lobos Avenue.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lombard Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Florida Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	760	511	249	1219	974	245	1822	1488	334

## RESULT OF ANNUAL EXAMINATION—CONTINUED.

SCHOOLS.	FOURTH GRADE.			FIFTH GRADE.			SIXTH GRADE.		
	No. Examined.....	No. Promoted.....	No. Failed.....	No. Examined.....	No. Promoted.....	No. Failed.....	No. Examined.....	No. Promoted.....	No. Failed.....
Denman Grammar.....	128	97	31	70	63	7	57	29	28
Lincoln Grammar.....	283	166	117	192	122	70	208	172	36
Rincon Grammar.....	165	112	53	70	36	34	.....	.....	.....
Washington Grammar.....	78	51	27	73	70	3	133	109	24
Union Grammar.....	87	73	14	65	45	20	78	56	22
Broadway Grammar.....	122	93	29	74	65	9	49	42	7
Spring Valley Grammar.....	84	78	6	51	49	2	98	82	16
Hayes Valley Grammar.....	170	120	50	163	136	27	161	125	36
South Cosmopolitan Grammar.....	181	151	30	119	104	15	59	47	12
North Cosmopolitan Grammar.....	143	124	19	95	85	10	68	53	15
Valencia Street Grammar.....	215	158	57	116	101	15	118	108	10
Eighth Street Grammar.....	136	81	55	134	91	43	156	149	7
Mission Grammar.....	155	107	48	175	127	48	60	51	9
Geary Street Grammar.....	97	75	22	71	51	20	78	57	21
Clement Grammar.....	79	40	39	88	49	39	97	64	33
Bush Street Primary.....	67	58	9	133	127	11	117	111	6
South San Francisco.....	35	16	19	31	22	9	47	42	5
Potrero.....	16	13	3	33	25	8	34	23	11
South Cosmopolitan Primary.....	106	87	19	111	78	33	106	90	16
Columbia Street Primary.....	82	57	25	90	69	21	108	93	15
Lincoln Primary.....	50	50	0	53	44	9	107	83	24
Market Street Primary.....	44	29	15	89	61	28	83	74	9
Market and Seventh St. Prim.....	.....	.....	.....	42	41	1	49	47	2
Mission Primary.....	.....	.....	.....	.....	.....	.....	119	113	6
Tehama Primary.....	.....	.....	.....	94	73	21	96	86	10
Broadway Primary.....	.....	.....	.....	50	13	37	55	30	25
Fourth Street Primary.....	.....	.....	.....	41	35	6	102	102	0
Silver Street Primary.....	.....	.....	.....	63	62	1	161	136	25
Pine and Larkin St. Primary.....	.....	.....	.....	65	61	4	97	93	1
Greenwich Street Primary.....	.....	.....	.....	46	26	20	100	64	36
Hayes Valley Primary.....	.....	.....	.....	46	38	8	78	63	15
Union Primary.....	.....	.....	.....	52	50	2	59	56	3
Shotwell Street Primary.....	.....	.....	.....	157	110	47	103	92	11
Eighth Street Primary.....	.....	.....	.....	37	29	8	36	34	2
Powell Street Primary.....	.....	.....	.....	53	52	1	50	42	8
Tyler Street Primary.....	.....	.....	.....	36	34	2	84	82	2
Spring Valley Primary.....	.....	.....	.....	45	36	9	56	49	7
Turk Street Primary.....	.....	.....	.....	.....	.....	.....	68	60	8
West End.....	5	5	0	8	4	4	9	9	0
Fairmount.....	19	14	5	39	23	16	54	43	11
Noe and Temple St. Primary.....	17	17	0	31	25	6	38	34	4
Ocean House.....	8	6	2	6	3	3	6	5	1
Laguna Honda.....	9	4	5	5	2	3	.....	.....	.....
Jackson Street Primary.....	.....	.....	.....	35	33	2	26	25	1
Castro Street Primary.....	10	9	1	15	15	0	25	21	4
San Bruno.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South End.....	.....	.....	.....	12	12	0	10	10	0
Lobos Avenue.....	.....	.....	.....	13	11	2	22	19	3
Lombard Street Primary.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Florida Street Primary.....	.....	.....	.....	6	6	0	6	6	0
Total.....	2591	1891	700	3098	2414	684	3531	2984	547

## RESULT OF ANNUAL EXAMINATION—CONCLUDED.

SCHOOLS.	SEVENTH GRADE.			EIGHTH GRADE.			TOTALS.		
	No. Examined.....	No. Promoted.....	No. Failed.....	No. Examined.....	No. Promoted.....	No. Failed.....	No. Examined.....	No. Promoted.....	No. Failed.....
Dennman Grammar.....	19	16	3	26	26	0	695	588	107
Lincoln Grammar.....							1048	714	334
Rincon Grammar.....							478	342	136
Washington Grammar.....	44	38	6	47	13	34	504	356	148
Union Grammar.....	54	45	9	30	30	0	419	312	107
Broadway Grammar.....	50	39	11	107	61	46	542	407	135
Spring Valley Grammar.....	68	59	9	94	84	10	521	468	53
Hayes Valley Grammar.....	46	36	10				878	668	210
South Cosmopolitan Grammar.....	59	44	15				867	729	138
North Cosmopolitan Grammar.....	18	17	1				511	430	81
Valencia Street Grammar.....	180	152	28	108	81	27	1071	860	211
Eighth Street Grammar.....	133	108	25				774	591	183
Mission Grammar.....	54	48	6				664	500	164
Geary Street Grammar.....	65	56	9	266	201	65	695	529	166
Clement Grammar.....	96	57	39	78	50	28	576	345	231
Bush Street Primary.....	137	123	14	219	105	114	738	582	156
South San Francisco.....	77	62	15	90	86	4	328	273	55
Potrero.....	62	55	7	64	50	14	240	188	52
South Cosmopolitan Primary.....	104	85	19	123	103	20	625	506	119
Columbia Street Primary.....	113	86	27	220	173	47	648	506	142
Lincoln Primary.....	117	107	10	210	210	0	537	494	43
Market Street Primary.....	135	114	21	244	169	75	595	447	148
Market and Seventh St. Prim.....	87	72	15	183	134	49	361	294	67
Mission Primary.....	120	110	10	398	373	25	637	596	41
Tehama Primary.....	160	121	39	162	152	10	512	432	80
Broadway Primary.....	59	50	9	258	163	95	422	256	166
Fourth Street Primary.....	110	96	14	373	293	80	626	526	100
Silver Street Primary.....	170	142	28	353	228	125	747	568	179
Pine and Larkin St. Primary.....	107	100	7	283	262	21	552	519	33
Greenwich Street Primary.....	153	106	47	163	114	49	462	310	152
Hayes Valley Primary.....	113	102	11	136	114	22	373	317	56
Union Primary.....	100	89	11	68	68	0	279	263	16
Shotwell Street Primary.....	123	108	15	160	143	17	543	453	90
Eighth Street Primary.....	92	92	0	262	227	35	427	382	45
Powell Street Primary.....	105	97	8	187	180	7	395	371	24
Tyler Street Primary.....	97	84	13	103	103	0	320	303	17
Spring Valley Primary.....	47	34	13	85	80	5	233	199	34
Turk Street Primary.....	110	97	13	249	207	42	427	364	63
West End.....	21	16	5	15	11	4	62	49	13
Fairmount.....	87	85	2	147	140	7	368	326	42
Noe and Temple St. Primary.....	22	18	4	80	80	0	196	182	14
Ocean House.....	16	15	1	13	11	2	58	47	11
Laguna Honda.....	10	8	2	13	7	6	44	24	20
Jackson Street Primary.....	36	30	6	84	58	26	181	146	35
Castro Street Primary.....	30	29	1	45	44	1	125	118	7
San Bruno.....				91	86	5	91	86	5
South End.....	2	2	0	16	16	0	40	40	0
Lobos Avenue.....	14	11	3	38	29	9	87	70	17
Lombard Street Primary.....	15	10	5	14	10	4	29	20	9
Florida Street Primary.....	14	9	5	12	7	5	38	28	10
Total.....	3651	3080	571	5917	4782	1135	22589	18124	4465

## SUMMARY OF ANNUAL REPORTS OF PRINCIPALS, JUNE, 1878.

SCHOOLS.	NUMBER OF PUPILS ENROLLED DURING THE YEAR, NOT INCLUDING PUPILS ENROLLED IN OTHER SCHOOLS.			NUMBER OF PUPILS EN- ROLLED DURING THE YEAR, EXCLUDING DUPLICATE ENROLLMENTS.			AVERAGE DAILY ATTEND- ANCE.			Number of days schools were in session during the year.....	Whole number of pupils received by transfers after the first week of the school year.....	Whole number of pupils promoted from lower to higher grades at the beginning of each school month, not including the first month of the school year.....	Whole number of pupils put down from a higher to a lower grade after the commencement of the school year.....	No. of teachers who are graduates of the Cal. State Normal School.....	No. of teachers who are graduates of any other State Normal School ....	Number of teachers who subscribe for some educational journal .....	Number of graduates of the Girls' High School of San Francisco.....
	Bet. 3 and 16 Years.	Over 16 Years.	Total.	Male	Fem.	Total	Male	Fem.	Total								
Boys' High.....	136	195	331	321	0	321	254.3	0	254.3	203	0	0	2	0	0	7	0
Girls' High.....	203	695	898	0	898	704.7	0	704.7	704.7	203	0	1	0	0	0	20	4
Denman Grammar.....	988	54	1042	0	1042	777.4	0	777.4	777.4	209	54	25	42	3	4	3	4
Lincoln Grammar.....	1436	38	1474	1474	0	1474	1036.2	0	1036.2	209	210	44	57	1	14	14	5
Rincon Grammar.....	540	60	600	600	0	600	453.9	0	453.9	209	60	8	0	0	0	1	3
Washington Grammar.....	631	16	647	647	0	647	545.8	0	545.8	209	61	45	18	0	6	6	1
Union Grammar.....	631	1	632	493	139	632	393	103	496	200	54	23	35	0	3	3	0
Broadway Grammar.....	633	19	652	0	652	504	504	0	504	209	76	0	23	1	1	6	2
Spring Valley Grammar.....	920	15	935	454	481	935	326.8	349.8	676.6	209	96	0	23	0	10	9	5
Hayes Valley Grammar.....	1113	14	1127	494	633	1127	389	521	910	209	142	32	39	3	13	18	6
South Cos. Grammar.....	984	48	1032	528	504	1032	434.1	434.1	869.5	209	58	39	6	0	4	4	2
North Cos. Grammar.....	752	10	762	369	393	762	253.1	253.1	548.4	209	58	36	8	0	0	14	6
Valencia St. Grammar.....	1620	35	1655	807	848	1655	594	594	1140	209	202	53	8	0	6	2	3
Eighth Street Grammar.....	870	7	877	406	471	877	350.2	397.6	747.8	209	103	2	8	0	0	6	8
Mission Grammar.....	866	2	868	385	483	868	305	357	662	209	132	16	2	0	0	4	8
Geary Street Grammar.....	1268	24	1292	703	589	1292	357.4	385.7	743.1	209	208	75	197	0	0	6	8
Clement Grammar.....	844	9	853	430	423	853	425	286	710	209	160	139	4	0	1	4	5
Bush Street Primary.....	904	0	904	511	393	904	370	296	666	209	134	2	10	0	1	5	2
South San Francisco.....	478	1	479	220	259	479	159	184	343	209	43	36	10	0	1	2	2
Potrero.....	343	0	343	181	162	343	116	108	224	209	31	45	6	0	0	1	4
South Cos. Primary.....	875	1	876	447	429	876	335	333	668	209	98	7	16	0	0	12	2
Columbia Street Primary.....	708	3	801	424	377	801	288.3	200.2	497.5	209	76	6	18	0	0	1	2
Lincoln Primary.....	986	0	986	412	574	986	385	673	1058	209	125	41	2	0	0	17	7
Market Street Primary.....	552	0	552	301	251	552	367	141	508	209	135	132	21	0	0	8	3
Mission Primary.....	971	0	971	503	468	971	336.5	281.7	618.2	209	255	20	0	0	0	1	6
Tehama Primary.....	1070	0	1070	612	458	1070	440.7	316.4	757.1	209	78	117	6	1	1	5	3
Broadway Primary.....	689	0	689	375	314	689	232.8	204	436.8	209	36	21	2	0	0	3	1
Fourth Street Primary.....	823	0	823	446	377	823	303	273	576	209	93	0	0	0	0	3	8



## SUMMARY OF ANNUAL REPORTS OF PRINCIPALS—CONCLUDED.

SCHOOLS.	NUMBER OF PUPILS ENROLLED DURING THE YEAR, NOT INCLUDING PUPILS ENROLLED IN OTHER SCHOOLS.			NUMBER OF PUPILS ENROLLED DURING THE YEAR, EXCLUDING DUPLICATE ENROLLMENTS.			AVERAGE DAILY ATTENDANCE.			Whole number of pupils received by transfers after the first week of the school year.....	Whole number of pupils promoted from lower to higher grades at the beginning of each school month, not including the first month of the year.....	Whole number of pupils put down from a higher to a lower grade after the commencement of the school year.....	No. of teachers who are graduates of the Cal. State Normal School.....	No. of teachers who are graduates of any other State Normal School....	Number of teachers who subscribe for some educational journal.....	Number of graduates of the Girls' High School of San Francisco.....
	Bet. 6 and 16 Years.	Over 16 Years.	Total.	Male	Fem.	Total	Male	Fem.	Total							
Silver Street Primary.....	1207	0	1207	629	578	1207	409.5	366.3	775.8	130	0	5	1	2	8	6
Tyler and Jones Primary.....	255	0	255	149	106	255	125	100	225	30	15	4	2	1	2	0
Pine and Larkin Primary.....	748	1	749	403	346	749	280	253	533	101	98	58	1	0	10	3
Greenwich Street Prim.....	808	0	808	478	330	808	346.2	257	603.2	59	35	0	0	0	0	3
Hayes Valley Primary.....	763	0	763	370	393	763	256.8	208.4	465.2	140	16	11	2	1	5	2
Union Primary.....	551	2	553	272	281	553	103.6	204.2	307.8	45	12	1	1	0	4	1
Shotwell St. Primary.....	935	0	935	489	446	935	322	294	616	157	3	7	1	1	10	5
Eighth St. Primary.....	822	0	822	423	399	822	277.1	238.5	515.6	20	104	4	1	1	1	4
Powell St. Primary.....	391	0	391	219	372	591	136	265	418	46	22	0	1	0	0	2
Tyler St. Primary.....	387	0	387	162	225	387	136	173	309	210	0	15	1	2	1	3
Spring Valley Primary.....	301	0	301	147	154	301	123.7	98	221.7	59	2	7	0	0	2	1
Turk Street Primary.....	499	0	499	262	237	499	207	187	394	120	21	9	0	1	6	6
West End.....	87	0	87	42	45	87	33.5	36	69.5	11	3	2	0	0	0	0
Fairmount.....	376	1	377	179	198	377	130.2	162.2	292.5	87	25	6	0	0	0	2
Xoe and Temple Prim.....	219	0	219	140	129	269	115.8	98.3	214.1	209	10	3	0	0	1	4
Point Lobos.....	66	2	68	48	20	68	30.9	11.2	42.1	0	0	10	0	0	2	1
Ocean House.....	65	0	65	35	30	65	28.4	25.5	53.9	2	2	0	0	0	1	1
Laguna Honda.....	81	1	82	45	37	82	33.8	23.7	57.5	0	0	3	0	0	2	1
Jackson St. Primary.....	249	0	249	124	125	249	92.6	84.3	176.9	42	15	0	0	0	1	3
Castro St. Primary.....	152	1	153	95	58	153	75.5	52.6	128.1	42	4	3	1	0	1	0
San Bruno.....	123	0	123	74	49	123	52	37	89	0	12	4	0	0	1	1
South End.....	89	0	89	51	38	89	30	26	56	9	22	0	0	0	0	1
Lobos Avenue.....	31	0	31	17	14	31	49	34	83	169	3	3	0	0	0	2
Longard St. Primary.....	33	0	33	16	17	33	29.4	30.2	68.6	49	0	0	0	0	1	1
Florida St. Primary.....	38	0	38	19	19	38	36.3	30.9	67.2	0	0	0	0	0	0	2
Evening.....	1145	2454	3599	3218	3381	3599	825.6	119.1	942.7	0	0	0	0	0	1	0
Total.....	34963	3709	38672	20584	18088	38672	13406.5	12885.2	26291.7	4436	1426	796	81	43	241	164

# REPORT OF THE CLASSIFICATION AND ATTENDANCE OF THE PUBLIC SCHOOLS, SEPTEMBER, 1878.

## PUPILS.

SCHOOLS.	NUMBER OF PUPILS.								Total.....
	1st Grade....	2d Grade....	3d Grade....	4th Grade...	5th Grade...	6th Grade...	7th Grade...	8th Grade...	
Denman Grammar .....	117	180	172	181	114	49	50	64	927
Lincoln Grammar .....	109	158	218	346	288	83	.....	.....	1202
Rincon Grammar .....	62	100	174	179	49	.....	.....	.....	564
Washington Grammar .....	40	43	76	93	120	101	46	.....	519
Union Grammar .....	35	42	67	101	83	71	65	64	528
Broadway Grammar .....	30	62	89	140	88	57	49	56	571
Spring Valley Grammar .....	41	68	89	96	87	87	76	228	772
Hayes Valley Grammar .....	93	116	176	218	178	122	62	67	1032
South Cosmopolitan Grammar .....	128	210	218	210	120	63	62	.....	1011
North Cosmopolitan Grammar .....	51	90	118	150	100	64	59	.....	632
Valencia Street Grammar .....	134	185	247	285	131	131	125	241	1579
Eighth Street Grammar .....	59	101	96	210	179	164	127	.....	936
Mission Grammar .....	66	89	155	203	200	61	.....	.....	774
Geary Street Grammar .....	42	99	100	162	63	58	85	150	759
Clement Grammar .....	46	110	110	116	121	120	65	128	816
Bush Street Primary .....	.....	.....	.....	127	125	133	141	189	615
South San Francisco .....	11	23	15	40	72	66	76	131	434
Potrero .....	10	15	16	29	37	78	45	95	325
South Cosmopolitan Primary .....	.....	.....	.....	124	110	105	84	251	674
Columbia Street Primary .....	.....	.....	.....	72	88	80	86	199	525
Lincoln Primary .....	.....	.....	.....	.....	61	122	170	363	716
Market Street Primary .....	.....	.....	.....	.....	107	163	233	454	957
Market and Seventh St. Primary .....	.....	.....	.....	.....	83	102	99	379	663
Mission Primary .....	.....	.....	.....	.....	.....	127	249	265	741
Tehama Primary .....	.....	.....	.....	.....	108	126	220	421	875
Broadway Primary .....	.....	.....	.....	.....	55	62	63	327	507
Fourth Street Primary .....	.....	.....	.....	.....	98	99	67	302	566
Silver Street Primary .....	.....	.....	.....	.....	121	171	166	449	907
Pine and Larkin St. Primary .....	.....	.....	.....	.....	40	96	107	365	608
Greenwich Street Primary .....	.....	.....	.....	.....	51	133	135	323	642
Hayes Valley Primary .....	.....	.....	.....	.....	59	109	107	362	637
Union Primary .....	.....	.....	.....	.....	51	119	121	260	551
Shotwell Street Primary .....	.....	.....	.....	.....	123	155	163	212	653
Eighth Street Primary .....	.....	.....	.....	.....	58	55	111	416	640
Powell Street Primary .....	.....	.....	.....	.....	.....	60	126	269	455
Tyler Street Primary .....	.....	.....	.....	.....	82	78	60	164	384
Spring Valley Primary .....	.....	.....	.....	.....	57	44	60	100	261
Turk Street Primary .....	.....	.....	.....	.....	63	119	126	379	687
West End .....	2	3	4	6	11	15	14	23	78
Fairmount .....	.....	.....	.....	40	49	51	103	122	365
Noe and Temple St. Primary .....	.....	.....	.....	.....	34	41	51	111	237
Point Lobos .....	.....	.....	.....	5	7	8	4	6	30
Ocean House .....	5	3	5	5	9	15	6	20	68
Laguna Honda .....	2	6	5	7	1	12	13	26	72
Jackson Street Primary .....	.....	.....	.....	.....	35	34	40	121	230
Castro Street Primary .....	.....	.....	.....	15	16	41	24	73	169
San Bruno .....	.....	.....	.....	.....	.....	.....	39	61	100



## REPORT OF CLASSIFICATION AND ATTENDANCE.

## PUPILS—CONCLUDED.

SCHOOLS.	NUMBER OF PUPILS.								Total.....
	1st Grade....	2d Grade....	3d Grade....	4th Grade....	5th Grade....	6th Grade....	7th Grade....	8th Grade....	
South End.....				6	10	5	10	21	52
Lobos Avenue.....								115	115
Lombard Street Primary.....					10	8	18	41	77
Florida Street Primary.....				15	13	18	22	58	126
Bernal Heights.....						5	8	29	42
Total.....	1083	1703	2150	3181	3765	3886	4038	8600	28406
Boys' High.....									329
Girls' High.....									847
Evening.....									830
Harrison Street Ungraded.....									56
Grand Total.....									30468

## REPORT OF CLASSIFICATION AND ATTENDANCE.

## TEACHERS.

SCHOOLS.	NUMBER OF TEACHERS.										Total.....	
	1st Grade....	2d Grade....	3d Grade....	4th Grade...	5th Grade...	6th Grade...	7th Grade...	8th Grade...	WITHOUT CLASSES.			
									GERMAN	FRENCH		PRINTS
Denman Grammar.....	2	3	4	3	2	1	...	1	...	...	1	17
Lincoln Grammar.....	4	6	4	6	4	4	...	...	...	...	1	24
Rincon Grammar.....	2	3	4	1	...	...	...	...	...	...	1	13
Washington Grammar.....	1	1	2	2	3	1	1	1	...	...	1	13
Union Grammar.....	1	1	2	2	1	1	1	1	...	...	1	11
Broadway Grammar.....	1	1	2	2	1	1	2	...	...	...	1	14
Spring Valley Grammar.....	1	1	2	2	1	2	1	4	...	...	1	15
Hayes Valley Grammar.....	2	2	3	4	3	3	1	2	1	2	1	22
South Cosmopolitan Grammar.....	2	4	4	4	2	1	1	...	3	1	1	23
North Cosmopolitan Grammar.....	1	2	2	3	2	2	...	...	1	1	1	15
Valencia Street Grammar.....	2	3	3	5	2	2	3	3	2	1	1	27
Eighth Street Grammar.....	1	2	3	3	3	3	3	...	...	...	1	19
Mission Grammar.....	1	2	2	2	3	1	1	...	...	...	1	14
Geary Street Grammar.....	1	1	2	2	2	2	1	4	...	...	1	16
Clement Grammar.....	1	1	2	2	2	2	2	2	...	...	1	15
Bush Street Primary.....	...	...	2	1	4	2	3	4	...	...	1	17



## NUMBER OF PUPILS STUDYING FRENCH, SEPTEMBER, 1878.

SCHOOLS.	1st Grade.	2d Grade.	3d Grade.	4th Grade.	5th Grade.	6th Grade.	7th Grade.	Total.	Number studying French, neither of whose parents is French.
North Cosmopolitan Grammar	13	26	24	27	33	31	35	189	90
South Cosmopolitan Grammar	14	47	47	43	29	13	12	205	155
Hayes Valley Grammar					12	15	15	42	23
Valencia Street Grammar	18	17	16	23	20	33	20	147	135
Bush Street Primary				51	25	23	26	105	58
Total	45	90	87	124	119	115	108	688	461
Boys' High								110	82
Girls' High								199	188
Grand Total								997	731

## NUMBER OF PUPILS STUDYING GERMAN, SEPTEMBER, 1878.

SCHOOLS.	1st Grade.	2d Grade.	3d Grade.	4th Grade.	5th Grade.	6th Grade.	7th Grade.	Total.	Number studying German, neither of whose parents is German.
North Cosmopolitan Grammar	9	25	45	51	29	31	14	204	57
South Cosmopolitan Grammar	39	148	165	127	87	48	47	711	75
Hayes Valley Grammar	11	16	33	54	63	50	30	257	34
Valencia Street Grammar	12	20	35	33	21	29	22	172	41
Bush Street Primary				59	59	83	73	279	34
Greenwich Street Primary					28	74	82	184	24
South Cosmopolitan Primary				87	88	86	55	316	87
Total	121	209	278	411	375	401	328	2123	302
Boys' High								50	26
Girls' High								71	13
Grand Total								2244	341

Boys' High School—No. of pupils studying both French and German	1
Boys' High School—No. of pupils studying Latin	164
Boys' High School—Number of pupils studying Greek	36
Boys' High School—No. of pupils studying both Latin and Greek	36
Girls' High School—No. of pupils studying Latin	33

## SCHOOL LIBRARIES.

SCHOOLS.	NUMBER OF VOLUMES.	ESTIMATED VALU.
Boys' High.....	454	\$550
Girls' High.....	1,200	1,000
Denman Grammar.....	698	349
Lincoln Grammar.....	1,277	500
Rincon Grammar.....	700	125
Washington Grammar.....	676	350
Union Grammar.....	328	175
Broadway Grammar.....	470	600
Spring Valley Grammar.....	498	500
Hayes Valley Grammar.....	350	200
South Cosmopolitan Grammar.....	734	700
North Cosmopolitan Grammar.....	1,180	380
Valencia Street Grammar.....	500	500
Eighth Street Grammar.....	416	496
Mission Grammar.....	35	150
Geary Street Grammar.....	13	10
Clement Grammar.....	200	275
Bush Street Primary.....	116	100
South San Francisco.....	128	50
Potrero.....	63	45
South Cosmopolitan Primary.....	206	50
Columbia Street Primary.....	15	10
Lincoln Primary.....	125	175
Market Street Primary.....	290	180
Market and Seventh Street Primary.....	67	20
Mission Primary.....	0	0
Tehama Primary.....	180	280 65
Broadway Primary.....	116	75
Fourth Street Primary.....	180	75
Silver Street Primary.....	163	90
Pine and Larkin Street Primary.....	76	100
Greenwich Street Primary.....	121	100
Hayes Valley Primary.....	113	30
Union Primary.....	25	20
Shotwell Street Primary.....	94	80
Eighth Street Primary.....	206	220 79
Powell Street Primary.....	82	30
Tyler Street Primary.....	62	75
Tyler and Jones Street Primary.....	10	8
Spring Valley Primary.....	30	25
Turk Street Primary.....	12	10
West End.....	15	2 50
Fairmount.....	27	2 50
Noe and Temple Street Primary.....	13	24
Point Lobos.....	1	10
Ocean House.....	24	10
Laguna Honda.....	36	25
Jackson Street Primary.....	0	0
Castro Street Primary.....	0	0
San Bruno.....	0	0
South End.....	0	0
Lobos Avenue.....	0	0
Lombard Street Primary.....	0	0
Florida Street Primary.....	0	0
Evening.....	0	0
Total.....	12,325	\$8,783 44

SUMMARY OF MONTHLY REPORTS OF THE PUBLIC SCHOOLS  
FOR THE SCHOOL YEAR ENDING JUNE 30, 1878.

Number of days' attendance of pupils, girls.....	2,672,884
Number of days' attendance of pupils, boys.....	2,722,342
Number of days' absence of pupils, girls.....	189,721
Number of days' absence of pupils, boys.....	192,981
Number of cases of tardiness of pupils.....	37,658
Average enrollment of pupils, boys.....	15,618
Average enrollment of pupils, girls.....	14,943
Average number belonging.....	26,932
Average daily attendance.....	25,952
New pupils entering without transfers, girls.....	5,413
New pupils entering without transfers, boys.....	8,470
Pupils received by transfers.....	6,685
Pupils transferred.....	4,635
Pupils left.....	6,240
Cases of suspension of pupils.....	179
Cases of truancy.....	1,474
Cases of corporal punishment.....	17,348
Cases of tardiness of teachers.....	2,499
Number of days' absence by teachers.....	2,131
Visits to parents by teachers.....	3,118
Visits to classes by School Directors.....	2,027
Visits to classes by Superintendent.....	751
Visits to classes by Deputy Superintendent.....	815
Visits to classes by other persons.....	17,727

REPORT OF THE RESULTS OF THE ANNUAL EXAMINATION OF  
THE HIGH SCHOOLS, MAY, 1878.

BOYS' HIGH SCHOOL.

CLASSES.	NUMBER EXAMINED.	NUMBER PROMOTED.	NUMBER FAILED.
Classical Senior.....	17	13	4
English Senior.....	17	17	0
Classical Middle.....	20	12	8
English Middle.....	34	19	15
Classical Junior.....	41	18	23
English Junior.....	93	51	42
Total.....	222	130	92

GIRLS' HIGH SCHOOL.

CLASSES.	NUMBER EXAMINED.	NUMBER PROMOTED.	NUMBER FAILED.
Normal.....	25	25	0
Senior.....	165	155	10
Middle.....	219	193	26
Junior .....	279	252	27
Total .....	688	625	63

## SCHOOL LOTS PURCHASED.

The following School Lots were purchased by the Board of Education during the year:

Block 410.—Commencing on the northeast line of Hayward street, 250 feet southeast from Harrison street; thence southeast on Hayward street, 25 feet by 75 feet in depth. Purchased from Alvinza Hayward and Charity Hayward, April 18, 1878, for \$1,200 00.

Mission Block 95.—Commencing on the east line of Sanchez street, 165 feet north from Seventeenth street; thence north on Sanchez street, 125 feet by 160 feet in depth. Purchased from Thomas M. J. Dehon, May 22, 1878, for \$8,250 00.

Block 145, Hayes Valley Tract.—On the southwest corner of Page and Gough streets, being  $137\frac{1}{2}$  feet on Page street by 120 feet in depth on Gough street. Purchased from John Gamble, May 22, 1878, for \$23,000 00.

Block —, Lot 1.—Commencing on the north line of Tyler street,  $82\frac{1}{2}$  feet east from Hyde street; thence east on Tyler street, 55 feet, by  $137\frac{1}{2}$  feet in depth. Part of 50-vara lot No. 1,257. Purchased from William H. Codington, June 3, 1878, for \$22,000 00.

Lot 2.—Commencing on the north line of Tyler street,  $137\frac{1}{2}$  feet east from Hyde street; thence east on Tyler street, 55 feet, by  $137\frac{1}{2}$  feet in depth. Part of 50-vara lot No. 1,244. Purchased from Samuel P. Middleton, June 4, 1878, for \$22,000 00.

Gift Map No. 2.—Block bounded by Cortland avenue, Laurel avenue, Jefferson street, and Moultrie street. Purchased from Edward Durkin, May 29, 1878, for \$1,800 00.

---

NEW SCHOOL HOUSES.

The following named school houses were completed during the year:

POTRERO SCHOOL,

SITUATED ON MINNESOTA STREET, BETWEEN NAPA AND SIERRA STREETS.

This is a two story frame building and contains eight class rooms. The plans and specifications were prepared by Joseph Gosling, architect, and the work was done under his supervision by Joseph Smith, contractor. The contract price was \$11,875; extra work, \$355 25; architect's fees, \$604 56; total cost, \$12,834 81. The school, formerly in the old building on the cor-



ner of Kentucky and Napa streets, was moved into the new building November 7, 1877. It contains eight classes and is under the charge of W. W. Stone as Principal.

FAIRMOUNT SCHOOL,

SITUATED ON CHENERY STREET, NEAR RANDALL.

This building is a two story frame, containing eight class rooms, and was built by C. R. De Burgh, under the direction of Charles Geddes, architect, who prepared the plans and specifications. The contract price was \$13,500; extra work, \$280; architect's fees, \$687 25; total cost, \$14,467 25. The school was moved into the new building November 15, 1877, and the old building on the same lot occupied by the new one was repaired and made ready for use should it be needed in the future. The school contains eight classes, and is under the direction of Miss H. M. Fairchild as Principal.

TURK STREET SCHOOL,

SITUATED ON TURK STREET BETWEEN BUCHANAN AND WEBSTER STREETS.

At first the building was a two story frame, containing eight class rooms, and was built by David Mulrein, contractor, under the superintendence of Joseph Gosling, architect, who prepared the plans and specifications. The contract price was \$12,400; extra work, \$125; architect's fees, \$624 25; total cost, \$13,149 25. The Laguna Street School which formerly occupied rented rooms in the basement of a church on Laguna street, near McAllister, was moved into this building December 13, 1877. Afterwards the roof of the building was raised and another story was added, thus increasing the number of class rooms to twelve. This extra work was done by J. Kneeder, under direction of P. J. O'Connor, architect, who prepared the plans and specifications. The contract price was \$4,900; architect's fees, \$245; total, \$5,145. The total cost of the building as it now stands is \$18,294 25. The work on the additional story was finished in June, 1878. The school now contains eleven classes, and is under the direction of Mrs. Georgia Washburn as Principal.

LOMBARD STREET SCHOOL,

SITUATED ON LOMBARD STREET, BETWEEN BAKER AND BRODERICK STREETS.

This is a one story frame building, and contains four class rooms. The plans and specifications were prepared by Charles Geddes, architect, and the



work was done under his supervision by C. R. De Burgh, contractor. The contract price was \$7,496; extra work, \$200; architects' fees, \$384 80; total cost, \$8,080 80. The school was opened March 25, 1878, under the charge of Miss Annie B. Chalmers, as Principal, and now contains two classes.

#### UNGRADED SCHOOL,

SITUATED ON HARRISON STREET, BETWEEN TENTH AND ELEVENTH STREETS,

This is a small one story frame building, containing two class rooms, and was erected by the carpenters of the Department at a cost of \$500. The school contains two classes and was opened June 3, 1878, under the charge of Mr. H. C. Kinne, as Principal.

#### TYLER STREET SCHOOL,

SITUATED ON TYLER STREET, BETWEEN PIERCE AND SCOTT STREETS.

This is a frame building and was raised and enlarged by the addition of one story, containing four class rooms. The work was done by M. Murray, contractor, under the direction of Charles Geddes, architect, who prepared the plans and specifications. The contract price for the improvements was \$5,550; extra work, \$250; architect's fees, \$290; total cost, \$6,090. The new rooms were finished and ready for occupancy November 12, 1877. The school now contains eight classes, and is under the charge of Miss E. Cushing as Principal.

During the month of May the Board of Education made arrangements for the erection of the following school houses.

A two class room frame building on Cortland avenue, between Laurel and Moultrie avenues, Bernal Heights. This building will be erected by the carpenters of the Department at a cost of about \$1,200.

A three-story frame building, containing twelve class rooms, on Mission street, between Twenty-fifth and Twenty-sixth streets. The contract was awarded to R. V. Bittebenner & Co. for the sum of \$17,900. The work will be done under the superintendence of P. J. O'Connor, architect, who prepared the plans and specifications.

A two-story frame building, containing eight class rooms, on Sanchez street, between Sixteenth and Seventeenth streets. The contract was awarded to Thomas Blanchfield & Co., for the sum of \$13,180. The work will be done under the superintendence of P. J. O'Connor, architect, who prepared the plans and specifications.

DETAILED STATEMENT OF THE FINANCES OF THE PUBLIC  
SCHOOL DEPARTMENT FOR THE FISCAL YEAR ENDING  
JUNE 30, 1878.

## RECEIPTS.

From taxes.....	\$385,671 12
From State apportionment.....	419,584 30
From poll taxes .....	69,514 70
From rents.....	150 00
From sale of old material.....	151 75
Total.....	<u>\$875,071 87</u>
Cash on hand July 1, 1877.....	183,398 44
Total.....	<u>\$1,058,470 31</u>
Less outstanding warrants, July 1, 1877.....	41,260 48
Total revenue .....	<u><u>\$1,017,209 83</u></u>

## DISBURSEMENTS.

For teachers' salaries .....	\$674,047 84
For janitors' salaries.....	40,025 63
For census marshals.....	2,294 50
For water.....	125 00
For text-books .....	4,971 57
For stationery and school incidentals.....	21,097 18
For furniture .....	32,003 63
For fuel and lights.....	5,168 43
For incidentals.....	14,883 64
For rents .....	7,253 05
For repairs.....	60,721 37
For building .....	49,617 15
For lots.....	77,050 00
Total.....	<u>\$989,258 99</u>
Total revenue .....	\$1,017,209 83
Total expenditures.....	989,258 99
Balance on hand.....	<u><u>\$27,950 84</u></u>

From the foregoing statement it will be seen that the sum of \$60,721 37 is charged to repairs. In explanation of this large expenditure, the Committee on School Houses and Sites presented a report to the Board of Education showing that the sum of \$30,000, charged to repairs, was expended in permanent improvements, thus reducing the cost of actual repairs during the year to \$30,721 37. The report referred to shows that during the year sixteen class rooms were built in various parts of the city; that two small buildings were erected for offices for Principals of schools; that one cottage was built on the school lot on Francisco street, and that quite a large sum was expended on other permanent improvements, such as erecting sheds and bulkheads, grading lots, constructing sewers, painting school buildings, fitting up rented buildings and fencing lots claimed by the Department under the "Van Ness Ordinance;" also that a considerable amount was expended in protecting school property claimed adversely to the Department. All these items were charged to repairs, and should be taken into account when considering the expenditures in detail.

---

#### SCHOOL FUND, 1878-79.

As required by law, the Board of Education adopted the following statement, prepared by the Committee on Finance, showing the amount needed to meet the expenses of the Department during the fiscal year 1878-79, and submitted it to the Board of Supervisors:

For teachers' salaries .....	\$710,000
For janitors' salaries.....	45,000
For census marshals .....	2,500
For water.....	200
For school text-books.....	12,000
For stationery and school incidentals.....	30,000
For furniture.....	30,000
For fuel and lights.....	10,000
For rents .....	10,000
For repairs and carpenter work .....	65,000
For incidentals.....	20,000
For buildings .....	45,175
Total.....	<u>\$979,875</u>

This estimate of the amount required was reduced by the Board of

Supervisors to \$879,875, which amount will, according to the report of the City and County Auditor, be received from the following sources:

From city taxes .....	\$364,875
From State apportionment.....	415,000
From poll taxes.....	70,000
From surplus cash.....	30,000
Total.....	<u>\$879,875</u>

The reduction of this estimate will prevent the Board of Education from erecting any school buildings except those now contracted for, and will almost entirely suspend the usual work on permanent improvements in and about the school buildings. The buildings now contracted for must be finished in accordance with the terms of the contracts, and the total cost, with the exception of one payment of \$4,500, will have to be drawn from the next year's fund, which will hardly be sufficient to provide for the running expenses of the Department. From a careful examination of the sources from which we expect to receive our next year's funds, it will be seen that there is great danger of a deficit at the end of the year. In May last the State Controller sent to the office of the Department a written statement to the effect that this city would receive about \$380,000 from the State School Fund during the next fiscal year. As will be seen by the foregoing statement of estimated receipts, the Auditor puts the receipts from the State at \$415,000. The receipts from poll taxes are placed higher than they were last year or the year before. There is also a probability that the receipts from city taxes will fall short of the estimates. Should this occur, it will be found that no provision has been made to protect the Department against such a loss. It is, therefore, evident that there will be a deficit in the School Fund of next year of about \$50,000. At the last session of the Legislature a law was passed forbidding all departments of the city government from expending in any month a sum exceeding one-twelfth of the estimated revenue of those departments. Under this law the monthly expenditures of the School Department will be limited to \$73,322 90. The operations of this law will work much inconvenience to the School Department, for the reason that during the first months of the year the largest demands are made for books, school supplies and fuel. The school buildings now contracted for will have to be paid for during the early part of the year, and this will undoubtedly cause much inconvenience in supplying the schools with fuel, books and other articles required at the beginning of the term.

Respectfully submitted,

GEORGE BEANSTON,

Secretary Board of Education.

## A GENERAL VIEW.

The schools of San Francisco are good. They are not the best in the country, but they are among the best. We have some poor teachers and poor teaching. We have some buildings that are unfit for school purposes and unworthy of a great city. Our Board of Education and our teachers are only moderately progressive. We have not the Kindergarten system of St. Louis, the fine Normal College of New York, the board of professional supervisors of Boston and the regulation requiring every appointee to be a graduate of a Normal School or to have had two years' successful experience; we have not the system of quarterly promotions of pupils prevailing in Chicago, nor the law requiring members of the Board of Education to go out of office at different times, which is the common-sense rule of every city in the Union but our own; we have not that sentiment in the community found in older cities that continues in office for successive terms faithful and experienced educators, and that compels nominating conventions to select the very best men for school officers.

We have, on the other hand, many excellent and well furnished school buildings, many faithful and successful teachers, an upright, intelligent and hard working Board of Education, a simple, practical and well digested course of study, and the co-operation and kind feeling of parents, pupils and teachers. Let any citizen visit the school nearest his dwelling, let him spend a few hours among teachers and pupils and I am satisfied that he will say that the money spent in popular education is well spent, and that in no other department of the city government do the people so nearly get the worth of their money. Still, our schools can be made better, their facilities can be extended and in this respect they will be materially aided by appropriate

## LEGISLATION.

Two bills were introduced into the last Legislature that failed to become laws on account of the apathy and opposition of our delegation in the Senate. One introduced by Senator Craig pro-

posed to extend the term of office of the Superintendent and other members of the Board of Education to four years and to elect half the directors every two years. The benefits that would accrue to our educational system from this change in the existing law are obvious. A four years term of office would render the Superintendency attractive to our best educators, both for other reasons and since it would afford time enough to originate and mature an educational policy. The present method of changing the membership of the entire Board every two years is extremely faulty. It exposes our schools to violent shocks from sudden changes in the course of study or in the management of schools. The first year of the incumbency of the Board may be characterized by excessive timidity or excessive rashness, and the last year may be disgraced by carelessness or even corruption. There is no other city or town in the Union—there is no country school district—that does not have the terms of office of its school officers expire at different times, so that a half or two-thirds of its school board may consist of experienced men.

The other bill, introduced by Senator Donovan, provided that the balance remaining in the School Fund at the end of each year should be transferred into a building fund for the next year. This is a much needed act of legislation. If this bill had become a law, the Department would at the present moment be in possession of more than \$100,000 with which to purchase sites and to erect buildings. With the law as it is, the Board was compelled to save a portion of this balance to the Department by purchasing four school lots, two of which are not available for building purposes during the present year on account of the insufficiency of the tax for school purposes levied by your Honorable Body. It is to be hoped that the San Francisco delegation in the next Legislature will feel interested enough in our Common Schools to revive and pass both these meritorious bills. I will next call your attention to the

#### NEEDS OF THE DEPARTMENT.

Two large primary school buildings, that will cost about \$25,000 each, are an imperative and immediate necessity. One would



take the place of the wretched and dangerous structure on Fourth and Clara streets; the other should replace the damp, ill-lighted and unhealthy building on Market street near Seventh, for which the Department is paying \$200 rent per month. The last Legislature passed a bill, introduced by Senator Donovan, instructing the Mayor, Auditor and Treasurer to issue bonds to the amount of \$43,500, to be paid for with the balance arising from the rental of the school lot on the corner of Market and Fifth streets, the proceeds of said bonds to be used in the purchase of a lot in the neighborhood of the Fourth and Clara streets building. The City and County Attorney has declared this act to be in conflict with a decision of the Supreme Court, since it subjects the city to a liability without the consent of your Honorable Body. The correctness of this opinion has not yet been tested before a court of competent authority, but I believe it is the intention of the Board of Education to submit the question to such a court. The Board of Education purchased, last April, a lot on Tyler street near Leavenworth, large enough for a school house that would accommodate the children now attending the school on Market and Seventh streets. It was the intention of the Board of Education to erect both these primary school buildings during the present year. But the action of your Honorable Body in reducing the estimated expenditures of the School Department \$100,000 has rendered this impossible. A visit to these two school buildings, each of which is attended by over 600 children, will convince any citizen that they are wholly unfit for school purposes, and that it is rank injustice to the taxpayers of those parts of the city in which they are situated to provide for them buildings so inferior to those in other districts.

A small building, containing four rooms and costing about \$3,000, should be erected immediately on the lot owned by the city situated on Pine street near Scott. This would relieve the pressure upon the Geary Street Grammar School. Several times during the past year the Superintendent has been compelled to transfer pupils from this school to other and more distant schools, much to the annoyance of parents and taxpayers. The primary classes of the Geary Street School are kept in an overcrowded

condition, notwithstanding that four rooms have been provided in small buildings erected in the yard.

A small building, at the cost of \$3,000, should be built near the Ocean House to replace the one recently destroyed by fire.

A building for the Girls' High School at the cost of \$40,000, to be erected on the school lot on the corner of Page and Gough streets, is not so urgently needed, but the erection of such a building in that locality would accommodate the city, on the whole, better than the two buildings now used for that school, and would be a boon exceedingly grateful to those parents living at the Mission and South of Market street. There would also follow the advantage of concentrating the school in one building.

Besides these obvious and pressing needs of the Department in the line of school accommodation, I am convinced that the time has come for, at least partially, enforcing the

#### COMPULSORY LAW.

One of the strongest arguments used to establish the justice of general taxation for Common Schools is, that a government founded upon universal suffrage cannot allow its citizens to grow up in ignorance. It is also said that it is cheaper and more satisfactory to educate people at the public expense than to pay the cost of their arrest, conviction and imprisonment for crime. But when one may see boys of school age lounging about the streets and wharves in school hours, engaged in no useful employment, but, on the other hand, waiting for some opportunity to engage in mischief or petty crime, one is led to ask, are not the taxpayers, to a considerable extent, defrauded of their rights? Do not the schools supported by their earnings fail to reach the very class for which they are especially designed? Have not the taxpayers a right to demand of the city government, which they so munificently support, some organized effort to put these idle and mischievous boys under some civilizing influence, and to prevent them from becoming dangerous and expensive criminals?

The Legislature has provided the legal motive power. It only remains for us to devise the machinery to make that power effec-



tive. I would suggest the opening of a central Truant School, to be put under the charge of an experienced educator distinguished for his firmness, kindness of heart and facility in gaining the confidence and respect of troublesome boys. I would have every boy found at large during school hours, unless performing some errand for his parent or employer, arrested and passed over to an officer especially detailed for that purpose. This officer should take the boy to the Truant School and the boy should be compelled to attend that school until he should be thoroughly reformed and transferred to some other public school, or if found incorrigible, he should be sent to the Industrial School.

To this school also should be sent those pupils that are suspended or expelled from other schools for truancy, disobedience, etc. I do not know any way in which the funds contributed for school purposes could be more wisely spent than in establishing a school of this kind, where boys that are now only idle and mischievous—not bad enough to subject themselves to legal penalties, yet too wayward to be allowed to associate freely with ordinary school children—can be brought under enlightening and refining influences, taught habits of obedience and industry and thus saved to themselves and to society. A rigid enforcement of the compulsory education law is precluded by the insufficiency of school accommodation. The Department has scarcely rooms enough for the voluntary attendance, and many of these rooms, as I have shown above, are shamefully overcrowded and unhealthy.

The present Board of Education, on coming into office, was at once impressed with the lack of facilities for children wishing to attend school and with the inequality of the distribution of these facilities. Wishing to remedy these evils as soon as possible, and knowing that the funds available for building purposes were inadequate, it subjected the expenditures of the Department to a careful scrutiny, and has succeeded in effecting a substantial

#### RETRENCHMENT.

By consolidation of schools and classes a saving of \$20,000 per annum has been effected, without in the least impairing the

efficiency of the schools concerned, but rather improving them by a more thorough and uniform classification.

By dispensing with the services of the special teachers of gymnastics and military drill, and of French and German in primary grades, a saving of \$12,000 has been made. By this change the instruction in French and German has actually been improved, as it is now done by the regular class teacher, who, in addition to her regular certificate, must also hold a French or German certificate. This obviates the necessity of changing teachers in the same class, or of having two teachers at the same hour in one class, and cures the evils that had grown up in discipline and instruction under the old plan of special teaching. The work of the special teacher of calisthenics is thrown upon the regular class teachers, and I have found it everywhere excellently done. The Board regretted the necessity of dismissing Major Hughes, the efficient Military Instructor. Many of the schools had made commendable progress in the military art, and were able to give fine exhibitions of their skill. But as many of the Principals were proficient in this branch, and all have the opportunity of visiting one another's schools, it was thought that sufficient instruction for practical purposes could be given by the Principals themselves, and that the continuance of a special teacher was a luxury that could not be afforded. In music and drawing a saving of nearly \$3,000 per annum has already been made, and it is in contemplation to reduce the staff of music teachers from seven to four, thus effecting a further saving of about \$3,000. The retrenchments already made at the suggestion of the Classification Committee amount to over \$36,000 per year. Besides this the Committee on Furniture and Supplies has done a great deal of intelligent and careful work in this direction, and will undoubtedly reduce expenses by the amount of \$10,000. The Committee on School Houses and Sites is actuated by the same spirit and the amount expended for repairs, etc., it is confidently expected, will be \$30,000 less this year than the amount expended last year. It is gratifying to think that this large amount—over \$75,000—will be saved to the city without damage to the schools and without reducing the well-earned salaries of the regular force of teachers. Yet the estimates of probable receipts made

by the Auditor are so largely in excess of what the Department will actually receive, that the Board will be compelled reluctantly to make a reduction of about \$50,000 more in teachers' wages, in order to keep the schools open the entire year. This leads me to say something more upon the subject of

#### SALARIES.

The statement is often made that teachers' salaries are higher in this city than in other cities. I have given this subject some thought, and have come to the conclusion that the salaries paid in San Francisco to male teachers are moderately liberal, while those paid to female teachers are the highest in the world.

A Principal of a Grammar School in New York and Boston is paid \$3,000 per annum; salaries of other male teachers are in proportion; here he is paid \$2,400 per annum. In other cities of about the size of San Francisco the average salary is about \$2,000. In Boston, where the scale of salaries is exceedingly liberal to female teachers, the maximum salary paid female assistants in Grammar and Primary Schools is \$62 50 per month, while here the maximum is \$95 per month and the average about \$70. The Board is often advised to economize by cutting down the salaries of male teachers. It will be seen that it would be gainsaying the wisdom of the educational world to take this step. Besides, the amount to be gained in this way is comparatively trifling. There are about fifty male teachers in the day schools. Suppose their salaries cut down an average of \$300 each per annum—thus reducing San Francisco from the third place in the Union, which it now occupies in this respect, to the seventh or eighth—the entire saving would be but \$15,000 per year. But suppose the salaries of female teachers should be reduced on an average \$150 each per annum, San Francisco would still hold the first rank in regard to the wages paid to female teachers, and the amount saved would reach \$90,000. But no one wishes to do this. Every one feels that the salaries paid to our cultured and faithful corps of lady teachers are little enough. We are proud of the chivalrous position we occupy, and we have a noble scorn of saving money for the taxpayers out of the necessities of de-

fenceless women. Even those who cry out "cut down the extravagant salaries of the school teachers" would shrink from such a proposition. Here, then, is a dilemma from which there is no escape—cut down the salaries, but spare the ladies! Well, we can save only \$15,000 from the gentlemen, and that is only one-seventh of the reduction in the estimates of expenditures for school purposes, which was made this year by your honorable body. And, upon reflection, it will not seem advisable to lower the salaries of our male teachers. Some seem to think that male teachers might be eliminated altogether, and the entire work of education be given over to women. A contrary opinion is held by conductors of private schools, whose interest is to secure the best results with the least expenditure of money. I know of no private schools, for boys, or for both girls and boys, that have passed through the primary grades, in which the corps of teachers is not largely composed of men. Female teachers are cheaper when paid at market rates; but these schools, conducted on strictly business principles, find it to their advantage to employ men at greater cost. A large number of writers on educational topics, and the majority of observant parents, hold that we have not men enough in our public schools, and that, in general, the upper grades of grammar schools should be in charge of male teachers. There are, to be sure, many female teachers that are doing excellent work in the higher grades; but these are the brilliant exceptions that prove the rule, and half of them are sacrificing health and life in attempting what is beyond their strength. Providence has wisely ordained that in the family the parents, the natural guardians and instructors of children, shall be of different sexes. The school, which is but a larger family, should imitate the order of nature, and mingle in the instruction and discipline of children, especially of those approaching maturity, the elements of both the masculine and feminine character. But the emoluments of the teacher's profession are not such as to attract men of first class talent and energy. While our offices are thronged with able women, anxious for employment, we have comparatively few male applicants, and these are men that could not reach the first rank in any other business or profession. Until first class lawyers,

physicians, editors and business men feel, at times, that they have made a mistake in life, and would, on the whole, have been better satisfied had they chosen to be teachers, I do not think it can be said that teachers' salaries are too high. Certainly those in whose hands we place the most valuable of our possessions, the minds and hearts of our children, expecting them to fashion this priceless raw material into forms of strength and beauty that shall be our "shining monument to the world," ought to be the peers of the most honorable and honored among men.

Among the important measures adopted by the present Board of Education to improve our schools and to extend their influence may be mentioned the

#### UNGRADED SCHOOL.

This was opened last May, in a small building erected by the School Department on the school lot situated on Harrison street near Tenth. It was designed for those boys that for various reasons are found to be far behind other boys of the same age, that have but little time to spend in school, and should use that time to the best possible advantage in acquiring the essentials of an ordinary education. The school was kept open during the June vacation, and assisted many boys who had failed of promotion in other schools to regain their standing and to begin the new year in the same class with their more fortunate or more industrious companions. For further information concerning this valuable special school, I refer you to the report, presented on a subsequent page, by its enthusiastic Principal, Mr. H. C. Kinne, who has been long and favorably known as a teacher of adults in the Lincoln Evening School.

#### THE PLAN OF MAKING PROMOTIONS

every six months, instead of once a year, as heretofore, has been introduced, but time enough has not yet elapsed to determine whether this is a real improvement. The end sought is to give the graded system more elasticity, by



allowing pupils, according to their varying degrees of capacity and industry, to complete the work of a grade in six months, a year, a year and a half or two years. Under our system, as followed in previous years, bright pupils were kept back by their more sluggish fellows, and those who just fell below the standard required for admission to a higher grade, were detained a whole year in reviewing work that might be well completed in a few months. This scheme of promotions includes also admissions to and graduations from the High Schools. So that after three years from the present we shall probably graduate two classes every year from the High Schools. It may be found, however, that the pupils admitted to the High Schools in the middle of the year will either lose or gain half a year during their three years' course, so that but one class a year will be graduated.

Promotions "on trial"—i. e., promotions of pupils that fail in examination, but are recommended for a higher grade by their class teachers—have been abolished. This practice had led to great abuses, especially in those schools in which there was a small attendance in the Grammar Grades. Principals and teachers were anxious to keep those grades full in order to make a favorable showing in comparison with other schools; consequently in too many instances pupils were advanced beyond their attainments, and there resulted the evils of cramming, poor classification and want of uniformity in grades. Pupils can now be promoted regularly every six months by an examination given simultaneously throughout the Department by the Classification Committee of the Board of Education, or, in exceptional cases, they may be promoted at any other time after a personal examination by the Deputy Superintendent.

We have also a rule by the operation of which any pupil found incompetent to perform the work of his class may be assigned to a lower grade. By these devices we secure all the advantages of the graded system and at the same time remedy its most prominent defect—want of elasticity and adaptation to individual peculiarities.

Another innovation is the establishment of a Saturday Normal Class for inexperienced teachers. Those teachers that have

had less than two years' experience are required to assemble at Lincoln Hall on Saturday, at 10 A. M., twice every month. Other teachers or other persons interested in education are also invited to be present. The exercises consist of an address by some member of the Board, by the Superintendent or Deputy Superintendent, essays by prominent educators and exhibitions of model classes. From time to time some school will be designated to hold a Saturday morning session, so that teachers may visit classes and see the various topics of the course of study under actual treatment by experienced teachers. The attendance at these meetings has been large and the exercises interesting and profitable. The best of feeling prevails; teachers and school officers are brought together and are inspired to labor emulously and harmoniously in their noble work.

A great reform has been made in the mode of appointing and assigning to duty

#### SUBSTITUTE TEACHERS.

In a Department so large as ours, employing nearly 700 teachers, many of whom are women in delicate health, many classes are deprived of the services of their regular teacher for periods ranging from one day to six months. The statistics show that on an average sixteen teachers are necessarily absent from duty every day. This is a great but unavoidable evil. Now, in order to lessen the harm arising to a class from the temporary absence of its regular teacher, it is evident that a person of extraordinary gifts should be sent to take charge of it. The substitute should be a teacher possessing great versatility, vivacity, sympathy with children and ability to command the attention and inspire the confidence of a strange class at once. The substitute should know intimately and in detail every part of the course of study, while the regular teacher requires so thorough a knowledge of only one-eighth of it. The substitute should be able to adapt herself, readily and easily, to the ways and whims of different Principals. Above all she should have that rarest of gifts, a conscience that will impel her to put forth her best endeavors without definite responsibility. For these reasons I hold that the position of substitute teacher is the most important,



the most difficult and the most responsible office in the Department, excepting that of Principal, and it should be the best paid. The present Board of Education found a very different view prevailing at headquarters, last December, though teachers, Principals and the Deputy Superintendent had unanimously arrived at the conclusion that the custom then in vogue of allowing two hundred applicants for positions to try their "prentice hands" on temporarily orphaned classes was "exceedingly wasteful, defective and inefficient."

The plan recommended in the last Annual Report of the Deputy Superintendent has been substantially carried out. A corps of 22 substitute teachers has been regularly "nominated, recommended, appointed and elected" by the Board. These substitutes report at the rooms of the Board every morning and are sent out to various schools on the reception of telegraphic signals. Of course, if a substitute is required longer than one day in the same class, she does not again report at the office till her services are rendered unnecessary by the return of the regular teacher. The substitutes thus become acquainted with the peculiarities of the different schools and gain an experience valuable alike to themselves and to the Department. They are paid \$3 per day for actual service in a primary class, \$4 in a grammar class, and \$1 50 for remaining at the office half a day to answer calls. The allowance of \$1 50 is made only when they report at the office and are not sent out to some school. With this scale of wages their annual salary is somewhat less than that of the regular teachers. I think this is wrong. They should receive at least 25 per cent. more than the regular teachers. Teachers and Principals express themselves very much pleased with the working of the new system. When they require a substitute they are now sure of getting an experienced and reliable teacher, who will give them no trouble and will be of positive benefit to the class. This is a point that has not received the attention it deserves in other cities. I believe that our solution of this problem is by far the best arrived at anywhere, and that, in this respect, we have made an important educational discovery. The course of study has been subjected to a searching analysis and thorough revision by the Classification

Committee. The Revised Course is confidently presented as simple and practical, and yet sufficiently liberal to give to all a sound English education. If you examine this course of study you will see that it shows what is attempted in the Primary, Grammar, Cosmopolitan and High Schools. The directions for the two latter sorts of schools occupy necessarily considerable space in the pamphlet entitled "Revised Course of Study," but it would be unreasonable to suppose that these schools occupy a proportionate place in our system of education. The total enrollment of pupils in all the schools is nearly 39,000. Of this large number 1,219 are in the High Schools and 2,811 are studying French or German in the Cosmopolitan Schools. But as these last devote but one-fifth of their time to French or German and four-fifths of their time to the English branches pursued in the Primary and Grammar Schools, they must be reckoned as equivalent to but 560 pupils devoting all their time to the study of foreign languages. Thus, out of the grand total of 39,000, only 1,779 are engaged upon studies outside of the ordinary English branches. Nineteen-twentieths of the pupils in our schools are instructed in the rudiments of a common English education, and nine-tenths of the money expended upon the schools is used for this purpose and no other. The Classification Committee of the Board of Education, appreciating these facts at their real value, expended much time and toil (for which expenditure they will be rewarded chiefly by the approval of their own consciences) upon the selection and arrangement of the matters included in the course of study for the four Primary and the four Grammar Grades. The general character of the work done by the Committee may be presented as follows:

1. They have allotted more time to the subject of Reading, have introduced the Sixth Reader into the First Grades and a little Illustrated Monthly Magazine into the Primary Grades.
2. They have increased the work required in Spelling and have transferred the special text-book on Word Analysis to the High Schools.
3. They have ordered a text-book in Arithmetic to be placed in the hands of every pupil in all the grades, down to and in-

cluding the Sixth. They have also re-arranged the work in Arithmetic.

4. The subject of English Grammar and Composition has been treated in a similar manner; pupils in the four Grammar Grades are required to be furnished with the text-book.

5. In Geography and History of the United States the Committee found the work very satisfactorily arranged as regards the use of the text-book and the omission of matters of burdensome and unimportant detail. In the former subject, however, a still further reduction of the amount to be learned was made. A large mass of material which had been piled upon the shoulders of primary children and labeled "Local Geography" was lifted off, and in its place were put a few simple questions on the globe and the cardinal points of the compass with easy exercises on maps of the hemispheres, of the United States and of California.

6. A radical change was made in the subject of "Oral Instruction." Under this head the Committee found the course of study burdened with matter taken from the whole circle of the sciences. Teachers were expected to lecture to little children upon all departments of knowledge and their pupils were expected to reproduce in written examinations information obtained by this easy process. The result was, on the one hand, a reprehensible amount and method of cramming; on the other hand, the indispensable but less showy arts of reading, writing, and ciphering were crowded to one side. In the present course of study more than half the matter under this head has been rejected. The text-books on Physiology and Physics have been dropped and their place is supplied by reading and talking about the matters treated of in that excellent little work, "Hooker's Child's Book of Nature." A new subject, "The Science of Government and the Rights and Duties of Citizens," has been introduced into the First Grade, to be taught orally by the Principal of the school. These lectures, followed by the instruction in Political Economy given in the High School, will supply a want that is beginning to be considerably felt—the want of preliminary training in dealing with the problems that vex modern

society, arising from the complicated relations of land, labor, capital, currency and government.

It was felt that oral teaching had been carried to an extreme. Even the subjects of Arithmetic and Grammar were taught to a great extent without books. Now, this seems to be erroneous. Telling is not teaching. The most prominent fault of teachers is to *tell* their pupils what they should be left to find out for themselves. Besides, school training is but the beginning of the education of life. One of the most valuable acquisitions of the scholar is his ability to make the proper use of books in after-life. Moreover, a good book is always better than an average teacher. On the whole, teachers were not found capable of presenting these important subjects to their pupils orally, and that mode of teaching would have been disadvantageous to their pupils had the best teachers been found. The Committee is of the opinion that it has secured all the good that can be derived from "Oral Instruction" by retaining in the course of study definite subjects to be presented in this manner. It is also of the opinion that more will in fact be accomplished, even though the course of study has lost some of its pretentious and high-sounding titles.

To some it will seem that these changes so confidently recommended by the Committee, and so generally approved by the Board, are steps backward. It is true that we have retraced some of the steps taken by our predecessors, but we had become convinced that those steps had been taken in a wrong direction. New Sciences and Arts were so clamorous for recognition as a part of the school curriculum—the "progress" of modern society seemed to demand so imperatively that Botany, Zoology, Mineralogy, Telegraphy, Physics, Chemistry and Phonography should be admitted into the school room, as at least of equal importance with Arithmetic and Geography, that educators yielded more or less to these claims and the consequence has been that in many of our large cities, the scheme of instruction has become beautiful and desirable, but, alas—impossible. We have found by experience that, in attempting to teach too much, we have taught nothing successfully; that we have tried to make currant bushes produce pumpkins—with no satisfactory result.

In view of these teachings of recent experience the Committee has endeavored to arrange the course of study in such a way that the graduate of our Grammar Schools shall be able to read intelligently and intelligibly a leading article in a first class newspaper, to perform the calculations required in business and the ordinary trades, to write a business letter perfect in form and construction, to tell something of the leading countries, cities, rivers and mountains of the world, and to think rationally about the history and constitution of his country. This is the gist of the matter; seven-eighths of his time in school will be devoted to the accomplishment of this purpose. Some time, by comparison insignificant, is left for the conveyance of general information by the oral lessons of the teacher and for rudimentary instruction in

#### MUSIC AND DRAWING.

The moral effect of vocal Music in the school room, and its indirect effect upon other studies by affording pleasant contrast and relief, are so well known and so generally appreciated that it is wholly unnecessary to say anything in defence of singing as a school exercise. Upon the question of theoretical instruction and the employment of special teachers at high salaries, opinions are more nearly divided and it seems proper, therefore, that I should give mine. I do not think the amount of theoretical knowledge required in the course of study is excessive. Pupils in the course of six years almost imperceptibly acquire, in short daily lessons, the ability to read by note simple Music in the keys commonly used for school, family and church Music. Most of the time given up to this subject is employed in the actual practice of singing; the small amount of theory imparted, when distributed over six years, occupies but a few minutes daily. In this way the foundation of a musical education is laid for those who have special gifts, while a pleasing and useful accomplishment is acquired by nearly all, enlivening and refining thousands of homes. But this elementary theoretical instruction can be given by nine out of ten of the regular class-teachers, and eight out of ten are sufficiently gifted with voice and ear to lead their classes



in singing. Since this is so, the employment of *seven* special teachers of Music, to teach what in numerous cases can be as well taught, and in some cases can be better taught, by Principals and class-teachers is, in my opinion, an indefensible piece of extravagance. These seven teachers of Music cost the city \$11,400 a year. Of course, if taxes were not oppressive and there were an abundance of suitable school accommodation, this luxury might be indulged in. But when the times and the condition of the School Department demand that the utmost care and economy should be exercised, this expenditure seems unreasonable and excessive. I think the work required in Music might be done—perhaps not so efficiently as at present, but proportionately as well as we can afford—by the class teachers under the supervision of *one* special teacher. I have ascertained by a circular letter and by personal inquiry that 80 per cent. of the teachers sing and have a theoretical knowledge of Music sufficient to teach their classes. The remaining 20 per cent. might exchange classes fifteen minutes daily with some teacher who can sing. The single supervisor of Music would be able to spend a whole day in the larger schools and a half day in the smaller schools, every month. This would be ample for supervision and examination, and I do not think the general results would be much inferior to those we have at present, while a saving of nearly \$10,000 per annum would be effected for the School Fund. It should be said in this connection that our city is twice as well supplied with Music teachers as the city of Boston. For that city, with double the school attendance and double the number of regular teachers, has just the same number of of Music teachers that we have. I am well aware that this is an extreme view—so extreme that for presenting it I shall be charged with prejudice, illiberality and lack of judgment. But when I look over the whole field and see among other things that two large Primary Schools are in wretched and unhealthy buildings, and that by the shrinkage of the Auditor's estimates, the entire force of teachers will lose a month's salary, I am compelled to think as I do about the employment of special teachers of Music.

## WITH REGARD TO DRAWING

the case is somewhat different. Many persons have the idea that Drawing, as taught in the Common Schools, is a mere accomplishment, and is designed to give pupils the elements of an artistic education. On the contrary, the intention is to make Drawing as practical and useful as Writing or Arithmetic. The system used in our schools is that introduced into the schools of Massachusetts, in accordance with a law passed by the Legislature, the intent of which was to provide instruction in Industrial Drawing in order to promote the manufacturing and other industrial interests of the commonwealth. Under this system pupils are taught the elements of form and proportion, familiarity with the use of simple instruments, and are trained to an accuracy of eye and hand valuable not only in a disciplinary point of view, but of direct practical benefit to them in any foundry or workshop in the city. I quote the following from Walter Smith, Director of Industrial Art Education for the State of Massachusetts:

“Commercially speaking, the power to draw well is worth more in the open labor-market to-day than anything else taught in the public schools; and education in industrial art is of more importance to the development of this country, and the increase of her wealth and reputation than any other subject of common school education. As a practical man, estimating the values of different elements in education as fitting people for useful lives, I consider that subjects like History and Geography which tell us of the past or of the physical features of other countries, when weighed in the balances against Industrial Drawing, must kick the beam; for the first would only indirectly help us to an occupation in the daily life of the present, while the intelligent and well-educated draughtsman is prepared for work in the great majority of industrial occupations, and in every country of the civilized world, wherever a workshop exists.”

There is respectable opinion in favor of introducing some form of instruction in manual labor into the Common Schools. We are often told that the schools educate children for business or the professions, and not only fail to provide training in the useful arts but inculcate and develop a positive distaste for earning



a living by the work of the hands. I do not think the responsibility for this distaste, if such a feeling exists, properly rests upon the schools; it belongs rather to the parents, to the prevailing sentiment of our society, or even to the natural instincts and desires of the human race. But this is by the way.

Instruction in trades can be successfully given in schools only in communities in which but a single industry is followed, as weaving, dyeing or watchmaking. In a city like ours, where the variety of trades is almost infinite, it is impossible to teach all, and it would be futile to teach some.

But in Industrial Drawing we have elements common to the vast majority of trades in which anything more than untrained muscle is required. The architect, machinist, engraver, mason, ship-builder, surveyor, gardener, moulder and carpenter eminently require to be good draughtsmen; while even the humblest artisan will be more skillful and more valuable if his eye and hand have been trained in his plastic school days to accuracy in seeing, and certainty in doing. For the school-boy in the study of Drawing handles tools requiring no mean degree of skill; and the skill thus acquired will enable him to handle other tools readily and skillfully. The drawing board, scale, ruler, square, compass and pencil are instruments of a higher order than the trowel, chisel, awl, shears, or plane; and the school-boy that has obtained facility in manipulating the higher order of tools will hardly fail of readiness in handling the lower.

But the pursuit of this study of Industrial Drawing also cultivates the taste and develops the idea of beauty; those children that possess a natural aptitude for art are stimulated and encouraged on their way to distinction, while all are subjected to a refining influence. Thus, for both esthetic and practical reasons, I think that the time and money spent upon this subject are so well and wisely employed that it should be among the last branches of study to be subjected to the pruning knife of the reformer or economist. In the

#### COSMOPOLITAN SCHOOLS

an important change was made by dropping the study of Languages in the Eighth Grade, making the instruction in

the Seventh Grade oral only, and dispensing with special teachers in all the four Primary Grades. The object of this change was to make these schools more efficient and less expensive. We are encouraged by the results thus far apparent. For further information regarding these schools I refer you to the able Special Report of Mr. Herbst, herewith submitted.

Whether French and German should be taught at all in the lower public schools is still with us an open question. It is evident that they are not taught as necessarily or properly belonging to a system of Common Schools, but only as a concession to the foreign element in our society. For in Boston no pupil studies German except in the High Schools, while in Cincinnati 53 per cent. of the pupils in the Primary and Grammar Schools study that language. Still, I do not favor the discontinuance of instruction in French and German. For, when the Cosmopolitan Schools were first organized hundreds of the children of foreign parents were attending private schools in order that they might receive instruction in the language of "Fatherland." Now these are found in our own Public Schools, associating with the children of Americans, under the care of American teachers and being moulded into the true form of American citizenship. How much better is this than to have them growing up clannish and apart. It seems to me that no lover of his country can begrudge the small addition made to our taxes for the salaries of eight teachers (all that are required at present), or can be long annoyed at the departure from the American idea of primary education made necessary to welcome and assimilate these accessions to our body politic, when he reflects that in the crucible of the Common School all differences of race melt and disappear, and that in the next generation, by reason of the wise concessions of the present, there shall be, in our commonwealth, no more Frenchmen or Germans, but only Americans.

#### HIGH SCHOOLS.

In the High School studies but little change was made. French and German, one of which was necessary for a diploma, were made optional and an equivalent amount of work in Word-

analysis and English Literature was required of those pupils who should elect not to study a foreign language. The schedule of studies in the Girls' High School was brought into closer uniformity with the course in the Boys' High School. The reproach cast upon the city that girls were not supplied with the same educational facilities as boys has been removed, so that girls can now, at their option, be prepared for any department of the State University, or can pursue the studies belonging to a higher English education only. In my opinion, too much time has heretofore been given in this school to reviews of Grammar School studies. If, as the Principal of the school states in his Special Report herewith submitted, five months in every year is necessary for this purpose, the Grammar Schools have done their work imperfectly or girls have been admitted to the High School at a too immature age. I am inclined to think that both these causes have contributed to the result and that a simpler course of study in the lower schools, severer examinations and a manlier attitude on the part of the Board of Education towards the tears and prayers of ambitious mothers and daughters will entirely remedy the evil; then the Girls' High School will take its proper rank among the schools of the city and the State. I refer you for further information to the special reports prepared by the Principals of the two High Schools. With their ideas upon the subject of "Over Education" I fully agree. When less than four per cent. of our pupils are in the High Schools, I do not think it can be feared that we shall have from this source too many teachers, professional and business men or too many intelligent men and women in the community. The assertion sometimes carelessly made that the graduates of our High Schools are unfitted for useful work is a baseless slander. I meet daily, in every walk of life, my former pupils in the High School. They are industrious, moral, intelligent, high-minded gentlemen. In the long period of twelve years I have not learned of *one* graduate of the High School who has failed to become a valuable and useful citizen and to repay amply to the city the cost of his education. The attacks sometimes made upon the High Schools seem to me unwise and unpatriotic. They are the great levelers, the conservators of the republic, the reconcilers of labor and

capital. For we have made them so good that the rich find it to their interest to patronize them; we have made them so cheap that the poorest may partake of their advantages; we have made their teachers so independent that they treat rich and poor alike and are no "respecters of persons." As a matter of fact, the rich and poor are about equally represented in their enrollment. Here, then, there are no "upper classes," but those who have gained this distinction by merit alone; here "the poor man's genius outranks the rich man's dunce." Besides, our State, since the establishment of the University, is fully committed to the policy of unlimited free education. We have followed in the track of the older States and have arrived at a complete system of free schools correlated in all its parts and co-extensive with the widest bounds of secular education. We cannot afford to mar the symmetry or impair the usefulness of this complete system by breaking so important a link as the free High Schools. Our structure of free public education is round and beautiful from the foundation stones of the Primary School to the turrets of the University. Let us seek to strengthen and adorn rather than to disfigure or destroy it.

The most important measure passed by the Board of Education is a new

#### MODE OF APPOINTING TEACHERS.

I will premise to what I have to say on this subject the following quotations from the new rules of the Board:

#### RULES OF THE BOARD OF EDUCATION CONCERNING THE NOMINATION, APPOINTMENT AND ELECTION OF TEACHERS.

##### APPOINTMENT AND ELECTION OF TEACHERS.

SEC. 46. Whenever an additional teacher is required, or a vacancy is to be filled, each Director may, in open Board, nominate one candidate for the position, and all nominations so made shall be referred to the Committee on Credentials and Qualifications of Teachers, who shall report thereon at the next regular meeting of the Board. Upon receiving the report of the Committee, the Board shall proceed to appoint one of the candidates nominated, to the position. The appointment shall continue for six months, unless sooner revoked by the Board.

At the expiration of the period of the appointment, the Board shall proceed to elect such appointee permanently to the position; *provided*, that he or she

present to the Board a certificate of success, signed by the Principal of the school, the Deputy Superintendent, and a majority of the members of the Committee on Classification; but if such appointee fail to present such certificate to the Board, his or her position shall be declared vacant, and a new appointment shall be made.

COMMITTEE OF CREDENTIALS AND QUALIFICATIONS OF TEACHERS.

SEC. 36. The Committee on Credentials and Qualifications of Teachers shall take under consideration all nominations of teachers made in open Board.

They shall carefully examine into the merits and qualifications of such nominees, and report to the Board the candidate or candidates whom they consider to be best qualified to fill the position for which the nominations were made.

They shall report briefly to the Board the reasons for their recommendations, and no person whose fitness for a position as teacher has not been considered by this Committee, shall be eligible to election to any position as teacher in the Department.

Nothing within the scope of the powers and duties of the Board of Education is of so transcendent importance as the appointment of teachers. For the schools are efficient or fruitless just in proportion to the character of their teachers. To secure good teachers, and not only that but to select from throngs of applicants those best fitted by nature and training for this sacred calling, is the solemn duty of the Board to the public. The crushing weight of this responsibility has not always been felt by School Directors nor always realized by the people. Many have lightly thought that a certificate is the only necessary qualification of the teacher. Others have imagined that there is no impropriety in distributing the patronage of the School Department among one's political and business friends—making the trainers of childhood of no more account than weighers and gaugers, sorters of letters or even copyists in other public places. Others again have regarded the schools as a sort of respectable alms house for the relief of widows and orphans, or an asylum for men broken down in business or politics—as if it were right for this generation to find employment for its own poor in giving poor schooling to the next.

In order to avoid falling into these errors, it is necessary to keep in mind three considerations:

1. The training of children is the "greatest and most important difficulty in human science;" no man for a moment



should allow himself to compare it with the merely clerical duties required in other departments of the civil service.

2. The appointment of a teacher will not be revoked during good behavior and in many instances will continue for life.

3. The possession of a legal certificate by no means proves its holder to be a competent teacher.

The certificate, waiving the question of fraud, proves merely that its holder possesses the minimum amount of *knowledge* required by the State law.

It does not prove a love of knowledge for its own sake and respectable attainments in some special field; it does not prove enthusiasm nor devotion to duty; it does not prove power to impart knowledge, nor the ability to secure that degree of order and attention which is essential to success in imparting knowledge; it does not prove good temper nor sympathy with children; it gives no promise of moral force nor loftiness of aim that shall tame the vicious, awaken the indifferent and encourage the good.

The teacher's certificate in these respects is like the lawyer's license or the physician's diploma. No man will risk his property or his life, unless compelled to do so, upon any so slight evidence of fitness. Yet many are willing to place the moral and mental well-being of their children in the hands of a teacher of whom they know nothing but that he or she holds a certificate.

But how shall we be sure that the candidates elected by the Board are in possession of these so essential qualities, no one of which is mentioned in the certificate. And how shall we eliminate as thoroughly as possible improper considerations of a social, business or political nature and determine our selection by merit alone. This is the problem that we have tried to solve, and we present the above rules as the best solution yet reached by any Board of Education of this or any other city, except the city of Boston.

By attentively examining the rules you will see that their theory is this:

1. Every Director will put in nomination for each vacancy that may occur the best one of those candidates that may have applied to him.

2. The Committee on Credentials and Qualifications of Teachers will deliberate upon these nominations for the space of two

weeks—and will give to one or more of the names presented the sanction of their recommendation.

3. The Board, by a majority vote of all its members, will appoint one of the candidates recommended by the Committee, or if the Board differs from the judgment of the Committee, it may appoint some one else of the candidates referred to the Committee, but *no new name can be presented and acted upon without reference.*

4. At the expiration of a probationary period of six months the candidate must present a certificate of success signed by the Principal of the School, the Deputy Superintendent and the majority of a different committee, that of Classification, when he or she will be finally elected by a majority vote of the entire Board to a position in the Department.

Such is the theory of our mode of appointing teachers. I am pleased to say that there has been enough of the spirit of self-sacrifice in the Board, and enough of devotion to the public good, to secure excellent practical results. With an enormous number of applicants, with an almost irresistible political and personal pressure exerted to influence every decision, I do not hesitate to say that seven-eighths of the appointments have been the best that could possibly be made; while, in the remaining cases, at least good appointments have been made, and the interests of the public have been well served.

Great credit is due to the members of the Board of Education for adopting a rule in which individual significance is merged into the judgment of the majority. Much praise is due to those who opposed the adoption of the rule, for their graceful submission to disappointment. For the rule adopted by the preceding Board warranted the expectation that they each were to become the autocrats of six schools—the royal dispensers of patronage, the almoners of the bounty of the people. Time and experience have, I think, convinced them all that the mode of managing the department in this respect that prevailed in the last Board, is not only a clear evasion of the law, but is selfish, undignified and unjust to the public. The Board, as a whole, is worthy of respect and gratitude for the patience with which it has submitted to the additional care and labor brought upon it by the new rule;



any labor has seemed light, provided that its object was to secure good teachers for the schools.

The method by which teachers are appointed by this Board is proudly claimed to be a substantial contribution to good government. If it shall ever be perverted, abused or materially changed, it will be because there is not wisdom and virtue enough in the Board of Education to put into execution a system that is the embodiment of simplicity and purity.

In conclusion, my thanks are due to the members of the Board for their uniform courtesy and kind co-operation; to the Secretary and other employees of the office for their invaluable assistance in my novel and responsible duties; to the Deputy Superintendent for his zeal and efficiency in the indispensable work of supervision and examination, also for his careful and noteworthy comments on the internal working of the schools, embodied in his accompanying report; and to the Principals of the High, Cosmopolitan, Evening and Ungraded Schools, for their cheerful compliance with my request to furnish special reports on the schools, with which they were more intimately acquainted than it was possible for me to be.

Gentlemen, I hope that you are convinced that the management of the School Department, while liable to errors arising from human imperfection, will compare favorably with that of any other department of the city government; I believe that you realize the importance to this and to the coming generation, of the work in which we, as school officers, are engaged; I am sure that you must feel that the money spent upon the schools is, on the whole, well spent, and that its amount cannot sensibly be diminished without seriously impairing their efficiency; I am confident that, after conferring with the Board of Education in the manner directed by statute, you will readily acknowledge that, in order to maintain the schools in their present high degree of excellence, and to build the school houses that I have spoken of on a previous page, it is your duty, next May, to levy for school purposes, the full amount of tax determined by law.

All of which is respectfully submitted.

A. L. MANN,  
Superintendent of Common Schools.

# REPORT OF THE DEPUTY SUPERINTENDENT.

To A. L. MANN, *Superintendent of Common Schools*:

SIR— I beg leave to present my report of the educational condition of the public schools of this city for the school year ending June 30, 1878, together with such suggestions as have occurred to me. I have continued during the year to inspect the classes of the department with as much frequency and regularity as has been possible in view of the other duties assigned to me by the Board of Education and the Superintendent. The results of these visits have been embodied in the semi-monthly reports which have been presented, as required, at the regular meetings of the Committee on Classification.

I must here express my gratification at the action of the Board in requiring the semi-monthly reports of the Deputy to be thus read and considered. It is very certain that the influence of this officer is thus rendered of much greater value to the department, especially when, as has uniformly been the case with the present committee, his reports and suggestions are received with due attention and consideration.

## SUPERVISION.

The large increase in the number of classes in the department, the necessity of investigating special cases of discipline, complaints of parents and alleged violation of rules and regulations, have interfered considerably with my regular work of supervision. I have also endeavored, as far as practicable, to look after the weak spots in the department, thus apparently neglecting, or leaving to the inspection of Principals, classes in charge of teachers of known ability and conscientiousness. In fact, Principals are, in this department, simply assistant superintendents, and they should be held to a strict accountability for the condition of their respective schools. I would suggest, as a supplement of the semi-monthly report of the Deputy to the Committee on Classification, a monthly report of Principals to the Superintendent, upon the instruction, discipline and progress of the classes under their charge. A still greater advance in the direction of efficiency and uniformity would be made, if the Principals were required to assemble at least

every two months, and confer with the Superintendent upon the subjects of general interest, such as regularity of attendance, truancy, tardiness, method of instruction in the various branches, neatness and correctness in keeping registers, the manner of teachers in presence of their classes, corporal punishment, the respect due by teachers to each other and to the parents of their pupils, and various other matters of interest. Such reports and such conferences would, in my opinion, tend very much to the unification and effectiveness of our public school system, and would largely counteract any tendency which may now exist in the direction of antagonism, jealousy or attempts at depreciation between the various schools of the department.

#### SUBSTITUTES.

I am convinced by my own observation that the action of the present Board, in entirely revolutionizing the former system of supplying temporary vacancies in classes, was eminently sensible and has resulted in great gain to the department. In my previous report I referred to the wastefulness and complete worthlessness of the system then in vogue. I have given particular attention to this matter during the past six months, and I have observed that the substitute teachers have acquired a readiness in adapting themselves to different classes and an acquaintance with the course of instruction in different grades, which enable them, even when placed in charge of a class for a single day, to equal and even to excel the work of the average class teacher. And I do not regard as well founded the allegation that the substitute teachers are too well paid. Their peculiar duties require an adaptability, an acquaintance with the entire course of study and an amount of patience and tact which are only the result of natural ability combined with study and experience, and which ought to be suitably compensated. A sufficient answer to such objections may be found in the fact that substitute teachers are uniformly willing to exchange their positions for regular classes, even at lower rates of compensation.

#### PROMOTIONS.

Another step in advance taken by the present administration is the wise restriction of the age of admission to the High Schools. This check upon the unreasonable ambition of parents and the senseless cramming of inconsiderate teachers will undoubtedly be for the advantage of the junior classes and for the best interests of those precocious children who otherwise would have been induced to enter upon studies far in advance of their age and mental development. The unwise promotion of individual scholars from grade to grade by the Principal for the purpose of filling classes, referred to in my last report, has also been sensibly checked by the action of the Com-

mittee on Classification in requiring all such cases to be submitted to the Deputy Superintendent. I would respectfully submit, however, that the necessity of attending personally to such cases of promotion, as well as to all cases where pupils are put back into lower grades, absorbs an undue proportion of the time of the Deputy, and I would suggest that the desired object might be attained if the Principals were required to report in detail all such cases at the end of each school month, for the consideration of the Superintendent and the Committee on Classification.

#### FREE TEXT-BOOKS.

The unprecedented demand for indigent books during the present year, amounting in some schools to *eight-ninths* of the books used, and the injury which has resulted from the delay in furnishing them, an evil so emphatically described by a member of the Board of Education at a recent meeting, certainly present powerful reasons why the subject of *free text-books for all* should be carefully considered at this time. The demoralizing and humiliating effect of our present system of "indigent books" was referred to by me in a previous report. I beg leave in this connection to present the able, concise and complete summary of the argument on this subject taken from the last report of the Superintendent of Public Instruction of Wisconsin, and also the original questions addressed by him to various State and City Superintendents, together with their answers to the same, showing in detail the cost, the methods, the results of the free text-book system.

The argument for free text-books is thus summed up by Hon. Edward Searing, late Superintendent of Public Instruction in the State of Wisconsin, in his last annual report.

"After a careful and impartial study of the text-book question, during the past four years, I have the fullest conviction that the plan of free text-books combines more practical and substantial advantages, from both the economical and pedagogical standpoint, than any other solution ever yet offered. The free plan of course involves the plan of district purchase at low wholesale rates; but if human testimony has any value, it involves a large additional saving through the more careful use of the books, and their continued use by different classes until worn out. It involves also the total absence of any unauthorized changes of books by teachers. It involves from the educational side, (1) a larger attendance of pupils, none being kept from the schools by the cost of the books they are unable to purchase; (2) the loss of no time at the beginning of a term from want of books promptly furnished; (3) absolute and constant uniformity of books, in the various classes; therefore (4) the best classification, the minimum number of classes, and the maximum amount of time devoted to each by the teacher; (5) convenience

in making transfers; (6) the educating influence over the pupils of the requirement to care for books.”

Mr. Searing also has the following on the “free plan in other States.”

#### FREE PLAN IN OTHER STATES.

“My three former reports have contained abundant evidence of the success and popularity of the plan of free books in other States. They have conclusively proved that this plan is no longer an experiment. They show that text-books have been entirely free in the public schools of the city of New York for more than forty years; that they have been so furnished in Newark, N. J., for twenty-five years; in Paterson, N. J., ever since the schools were organized; in Lewistown, Maine, for five years; in Fall River, Massachusetts, for four years; in Bath, Maine, for eight years; in Batavia, Ill., for ten years; and that for years books have been free in some hundreds of districts in Kansas.

Of the numerous other localities, not specially designated in former reports, where free books have been approved and adopted, I will mention only Philadelphia, from which the reply to my circular letter of inquiry was received too late for insertion in the report for last year. The Secretary of the School Board informed me last spring, that in that city, text-books ‘are supplied to all;’ that they have ‘always been supplied to pupils;’ that they ‘are supplied at least one-third cheaper than they can be purchased by pupils;’ that the result is ‘a-larger attendance;’ that the plan is ‘very satisfactory;’ and that the cost ‘averages \$1 per pupil per annum, including all schools, high and normal.’ Accompanying the answer was a printed ‘list of books and stationery furnished to the public schools of the city of Philadelphia, with the prices annexed.’ ”

The following extracts from recent educational reports indicate a widespread and growing conviction among the best educational authorities, that in the free plan, now in successful operation in Wisconsin, is to be found the best practicable solution of the troublesome text-book question.

Says Hon. Warren Johnson, late State Superintendent of Schools of Maine, in one of his reports: “At first thought it would seem that sufficient provisions have been made for the education of *all* our youth, when the school house and the teacher, shelter and tuition, had been freely granted at public expense. The pupil, however, can accomplish but little without books—his tools. To furnish these at private expense proves in many instances a hardship, particularly to poor parents with large families, and more especially to the itinerant laboring class. To lighten this burden, some States have established regulations by which the same series or editions of text-books should be used throughout the limits of the State. This plan has not invariably been



successful. Within a few years it has occurred to some of our most intelligent communities that the burden can be entirely lifted from the classes indicated by furnishing books at public expense, precisely as school shelter and tuition are. The advantages of this plan were alluded to in my last report, and the experience of the city of Bath was brought in testimony as presented in the report of Superintendent S. F. Dike. I am pleased to call the attention of school officers to this important feature again this year, by presenting the following communication from Thomas Tash, Esq., Superintendent of Schools, city of Lewiston. The plan is equally desirable and possible in *all* our towns, and, it seems to me, would be readily adopted by our people, if school officers would clearly present the same for their consideration at the annual town meetings. By reference to section 6, school laws, it will appear that sufficient authority is given towns to accomplish this desirable object, broadening present school facilities with immense advantage to children and large saving of expense to parents."

Hon. E. H. Apgar, now and for many years past the efficient Superintendent of New Jersey, says: "There is no reason why the purchase of books should not be met by a common tax, as well as that incurred for erecting school houses, hiring teachers, or purchasing fuel. The custom is common in the cities, and there is no reason why it cannot be introduced in the rural districts with equal advantage."

Hon. John Fraser, Superintendent of Public Instruction of Kansas, says in his report for 1875: "If text-books are owned by a school district, uniformity of books can be secured, in that district, without any trouble; and classes can be formed at the opening of the school, and pupils, on entering, can be classified, without any waste of time arising from the negligence or unwillingness of parents or guardians to furnish text-books. \* \* \* According to the report of the past year, 338 school districts own their text-books. \* \* \* Having conversed with many persons belonging to districts that own their text-books, I have learned from them that the plan works acceptably where it has been fairly tried."

In his last report (1876) Mr. Fraser says: "I still believe this plan to be the best solution of the question of text-book uniformity, at the least expense to the people."

Hon. Ezra S. Carr, Superintendent of Public Instruction of California, says, in the last biennial school report of that State: "No subject has attracted greater attention from the educators of the country during the past two years, or has been more generally recommended, than that of supplying free text-books to the public schools. Having been successfully tried forty years in the city of New York, thirty in New Jersey, eight in the State of Illinois, from five to ten in many eastern cities, where the cost of books has been reduced from three dollars to from seventy-five cents to one dollar for each child, it cannot be regarded as an experiment. From the mass of testi-

mony added, I have no doubt that this plan would increase the attendance and efficiency of the schools."

And prefacing several pages of my last year's report, reprinted in his own, Dr. Carr says: "The following extracts from the last report of the Superintendent of Public Instruction in Wisconsin exhibit the present status of the free text-book question. May not the right to choose, purchase and own their text-books, under proper restrictions on the part of trustees and boards of education, thus recognizing the right and capacity of the people for self-government, be a solution of our present text-book dilemma?"

Hon. Chas. S. Smart, State Commissioner of Common Schools of Ohio, in his report for 1876, says: "How many of these children out of the public schools, or irregular in attendance, are out or irregular because their parents are unable to buy the books required, I am unable to say. There can be no doubt that many of the independent poor prefer to let their children stay out of school rather than accept the *charity* offered to the indigent by the Board of Education. We have a public school system wise, beneficial, extending to all, the rich and the poor alike, the privileges of a common school education, and *any influence or interest* within the system, or extraneous to it, which excludes, or tends to exclude, any child of school age, rich or poor, white or black, from the privileges of this education, intended to be *free*, is in antagonism with the interests of the public, and should be frowned down by popular sentiment, or restrained by legislation."

And best of all, Superintendent Wickersham, of Pennsylvania, whose ability and large experience make his opinion peculiarly valuable, gives his unqualified indorsement to the free plan, in his last annual report, some advance pages of which I have received. He says: "On the whole there seems to be no better way of treating this subject of text-books, than for Boards of Directors to furnish them as they do school apparatus and appliances, free to all pupils attending the schools. This plan has several very obvious advantages: it lessens the cost of the books one-third, if not one-half; it secures perfect uniformity of books in each school district, and consequently, complete classification of the schools; it saves the expense of purchasing new books upon changing residence from one district to another; it does away with the invidious distinction that is apt to prevail among the pupils of a school where some procure books at the public expense, and others provide them at their own; and it enables teachers to advance their classes when prepared, and to introduce new studies, without meeting the difficulties usually thrown in their way when additional books are to be purchased. These are important advantages."

After answering objections, he adds: "Philadelphia has furnished books to the schools, with other supplies, for many years, and all the leading school men of the city approve of the plan. Books are also furnished free in a considerable number of school districts in different parts of the State, and in



them all, so far as is known, the plan meets with general approval. The same is true of many places that might be named outside of the State. As it is somewhat doubtful whether the law, as it now stands, gives school boards the legal right to purchase books to be furnished free to all the pupils in the schools under their control, I recommend the passage of a law allowing them to use their discretion in the matter."

The following extracts from the last report of the Superintendent of Public Instruction of Wisconsin exhibit the present status of the free text-book question. May not the right to choose, purchase and own their text-books, under proper restrictions, on the part of Trustees and Boards of Education, thus recognizing the right and capacity of the people for self-government, be a solution of our present text-book dilemma?

In January I sent a circular to the various Eastern cities and towns in which the *free* plan has had full trial, requesting answers to certain questions. I select the following from the responses received:

*From PATERSON, N. J.:*

"Question 1. To what extent are text-books furnished free to the pupils in your schools?

Ans. All are furnished with the books required.

"Q. 2. How long have they been so furnished? Ans. I cannot tell, but I think it has been so since the schools were organized.

"Q. 3. What are the results in respect to economy? Ans. It is a great saving.

"Q. 4. What are the results in respect to school efficiency, attendance, etc.? Ans. Excellent.

"Q. 5. Are the books as well cared for by the pupils as if owned by them? Ans. They are.

"Q. 6. Does the plan give general satisfaction to those concerned? Ans. It does.

"Q. 7. What are your regulations governing the distribution of books? Ans. Each pupil must replace any books lost, damaged or destroyed. I send you my last annual report, in which you will find question 7 fully answered.

"Very respectfully,

"WM. J. RODGERS,

"Superintendent."

The above shows all the questions of the circular.

---

*From FALL RIVER, Mass.:*

"Answer to question 1. All the text-books and stationery used in the school are furnished free.

"Answer to question 2. They have been so furnished nearly four years.

"Answer to question 3. The cost is not one-half, under this arrangement, what it would be if each pupil furnished his own.

"Answer to question 4. The books are now ready on the first day of each term, and the attendance is very much improved.

"Answer to question 5. The books are very much better cared for. This may seem strange to you, yet it is a fact.

"Answer to question 6. It gives general satisfaction. I have yet to hear the first complaint against the plan.

"Answer to question 7. See inclosed label (given below).

"Yours very truly,

"W. CORNELL, JR.,

"Superintendent of Schools,"

*Seal  
of the City  
here.*

# PUBLIC SCHOOLS.

THIS BOOK BELONGS TO THE

CITY OF FALL RIVER.

It is lent to the Teacher of

MORGAN STREET GRAMMAR SCHOOL,

Room No. —.

Book No. —.

*All* Books must be accounted for to the Superintendent by the teachers at the close of each term.

Teachers may allow pupils to carry their books home for study, but in case of loss or material injury the book must be replaced at once by the pupil.

To mark upon or otherwise deface any book furnished by the city must be regarded as a serious offense.

Teachers will be held responsible for the proper account and care of books.

From NEWARK, N. J. :

The following valuable information comes from this city :

"NEWARK, N. J., February 3, 1877.

"DEAR SIR : 1st question—Ans. I send you a list of books, stationery, etc., furnished entirely free. (The list embraces everything used in all grades, from primary to High School, inclusive.)

"2d question—Ans. Twenty-five years.

"3d question—Ans. As it regards economy, the accounts show that for the last ten years the books and stationery have cost an average of less than seventy-five cents a year to each pupil, including primary, grammar and high schools.

"4th question—Ans. Under this system there is no excuse for a pupil's absence on account of the necessary books or implements for work ; consequently we believe the attendance is.

more regular, and pupils will necessarily progress more rapidly than they otherwise would, thus adding greatly, we believe, to the efficiency of the schools.

"5th question—Ans. I believe they use their books in school as well as if they were their own. Primary pupils are not permitted to take their books home, and others only one book for studying a lesson. Pupils are required to cover each book with strong cloth. The books given to a class are examined every two weeks by the teacher. If any book is lost or willfully marred or defaced, the pupil is required to pay for such damages, on penalty of dismission.

"7th question—Ans. Proposals are solicited from several parties for furnishing books as they may be needed, according to schedule furnished. The one who receives the contract prepares himself with the necessary supply.

"When a Principal needs books for his school, he makes an order on the Secretary, keeping a duplicate himself. The Secretary approves or refuses as he thinks wise, and keeps a duplicate in a book purchased for the purpose; then the order is sent to the contractor, who supplies the order to the schools. A class receives a set of books, which they use until they are promoted to a higher grade.

"These books are left behind for the class below, and so everything in that grade in the way of books, stationery, etc., remains until worn out.

"I believe the method adopted of furnishing books, etc., is a saving of fifty per cent. to the patrons of the schools over that of each pupil furnishing his own.

"Please find below the average number of pupils enrolled, and the entire cost of books and stationery for the years 1873-4-5-6 :

YEARS.	NO. PUPILS.	COST.
1873.....	10,302	\$7,607 10
1874.....	10,867	7,649 05
1875.....	11,518	8,183 07
1876.....	12,198	8,223 10
Total.....	44,885	\$31,662 32

"This aggregate cost includes books, etc., for the evening schools, the cost of which is about \$300 a year, and the evening school pupils are not included in the number given you. So that the cost for the day school pupils will be a trifle less than the sum I named—about 70 cents

"Respectfully yours,

"GEO. B. SEARS,

"City Superintendent Public Schools."

From CITY OF NEW YORK :

Hon. Henry Kiddle, City Superintendent, writes as follows :

"OFFICE BOARD OF EDUCATION,  
NEW YORK, February 8, 1877. }

"DEAR SIR: Yours, with interrogations in regard to text-books, received, to which I take pleasure in responding :

"(1.) Text-books are entirely free in New York.

"(2.) Upward of forty years.

"(3.) I cannot answer this question. Of course, the supplying of books adds a large amount to the expenses of the system. Whether, on the whole, the books would cost more or less if supplied by parents, I am unable to say. There is, however, great economy of time to our Principals in the system of free books.

"(4.) I have no statistics bearing on this point. There can be no doubt, however, that the

schools are more efficient and the attendance of pupils larger, by the operation of the system of free books.

"(5.) We enforce the greatest possible care of text-books by the pupils.

"(6.) No dissatisfaction has ever been expressed with the school law on this account.

"(7.) I send a copy of the manual of the Board, from which you will be able to obtain a full answer to this interrogatory. I shall mail also some blanks, etc., referring to the matter.

"With much esteem, yours truly,

"HENRY KIDDLE,

"City Superintendent."

From LEWISTON, Me.:

The following letter is from Thomas Tash, Esq. whose admirable communication published in my first annual report was one of the strongest arguments for free books there presented:

"OFFICE SUPERINTENDENT PUBLIC SCHOOLS.

LEWISTON, ME., February 3, 1877. }

"DEAR SIR: Yours of the twenty-sixth instant is at hand. I send you two copies of city school reports, in which the answers to your questions are satisfactorily given. As time brings us experience, the 'free text-book' plan commends itself still more favorably. Should you have in your office our State Superintendent's Report, eighteen hundred and seventy-three, on page seventy, etc., you will find our experience stated, since fully verified. I will also here answer your questions in order but briefly, hoping it may be of some service to you:

"1. We furnish text-books and every other needed school appliance to all our schools of every grade.

"2. We have furnished in this way about five years.

"3. School books, stationery and other appliances do not cost the city much, if any, over half the cost to citizens; and if we consider the *time books are used*, not nearly in that proportion.

"4. Free text-books add greatly to the convenience and efficiency of our schools, and much to school time. Teachers fully concur in this.

"5. Books are much better cared for than when owned by pupils, and are entirely free from pencilings and obscene drawings, etc.

"6. All express themselves satisfied with the plan; none would care to oppose, I fancy. The people are for it, so politicians cannot be against it.

"7. Books are furnished to the schools, for the use of the scholars, under the direction and care of the teachers, who are held responsible for their use, and to see there is no abuse. Children carry them home freely, but all are kept in the school-rooms in vacations. Each book is stamped with city or office stamp and properly labeled. Reader, speller, arithmetic, etc., No. 1, is placed in desk No. 1; 2 in 2, and so on; so each child is responsible for that number. If they change desks, child No. 1 may be charged books No. 1, etc., so books can be easily looked up in case of question.

"All books, so, far, have been purchased by the Superintendent of Schools, directly of publishers, at forty per cent. off retail prices. When we exchange books we get one-half and ten per cent. or fifty-five per cent. off retail prices. Books have been distributed to teachers from Superintendent's office, on their order. This adds to the work of the office. We now propose to allow one of our merchants five per cent. on cost, the cost being same as above, and we order of him, or sanction teachers' orders; then the city will deal with but one person, and this office will be relieved of all the work of receiving and delivering material. This, I think, will suit us much better, and the expense be, on the whole, no more.

"Hoping that as a State Wisconsin may lead off in *requiring* all needed school material furnished free to her schools.

"I am, respectfully.

"THOMAS TASH."

The City Superintendent of Trenton, New Jersey, writes that books are furnished in that city only to the indigent, but says:

"I believe the free plan to be the proper one, more economical and more efficient. I am endeavoring to have our Board adopt it, and expect ultimately to succeed."

The City Superintendent of Troy, New York, also says that in that city books are loaned only to those who lack them, through poverty or willful negligence of parents or guardians, but adds, in answer to question 3:

"I can give no reliable information on this point, but I *believe* that it would be true economy to furnish, at the public charge, *all* books for pupils in primary and intermediate departments."

He also adds, in response to question 4, that free books to those who need them are "decidedly favorable to the *efficiency* of the schools, adding to the attendance the names of *nearly* all who receive the books," and that the books are generally well used.

Dr. Wm. T. Harris, the well known Superintendent of the Schools of St. Louis, writes that books are furnished free to indigent pupils in that city, to the number of five thousand two hundred or thirteen per cent. of all enrolled, that they have been so furnished for twenty years, at a cost to the Board of about one dollar per pupil per annum. He reports that the free plan "greatly aids" school efficiency, attendance, etc., and says, in answer to the question whether the books are as well cared for by pupils as if owned by them: "Yes, better."

But citations need not be further extended. Those here given, to say nothing of those presented in the two previous reports, show conclusively that free text-books are no longer in the domain of experiment. From New York, with its forty years trial, as from Lewiston, with one of five years, comes the same certificate of approval. My last report contained evidence of eight years successful experience in Illinois, and showed that Kansas had approved the plan by adopting it in hundreds of her districts, and that even California responded to Maine in commending this solution of the vexed question.

I reprint, with slight alteration, the final paragraph of the chapter on this subject in my last report:

"Free text-books are already to be found in many districts and towns of this State; and are giving great satisfaction. They will yet prevail. The saving of nearly one-half the original cost, the removal of the last exception to the absolute freedom of the schools, the economical use of books by successive classes, the less frequent changes when School Boards have the responsibility of purchasing and caring for public property, instead of merely dictating what others shall purchase and care for, the absolute uniformity secured to the extent that is really essential, in districts and townships, and the full and prompt equipment of the schools with books at the beginning of the term, these (and other) great and manifest advantages will yet make free text-books everywhere the adjunct of free schools. In this belief we were supported by the formal approval of the State Convention of local Superintendents last winter, we are supported by the most intelligent teachers of the State, by several of the ablest and most experienced Superintendents of Public Instruction in Eastern States, by educational writers there, including the editor of the educational department of the *Atlantic Monthly*, by successful trial there, and, most of all, by the plain teachings of political economy."

---

#### SANITARY CONDITIONS.

As a general thing, the condition of the schools of this Department in a sanitary point of view is quite satisfactory, but there are many classes where a change for the better would be desirable. The attention of Principals should be particularly called to the two subjects of *light* and *ventilation*. There is no doubt whatever that near-sightedness increases regularly from the



first entrance of a pupil into the public school till his departure; an increase extending, according to careful observations, from zero to fifty per cent. That is, of one hundred children entering the eighth grade entirely free from near-sightedness one-half will be found to be near-sighted upon their graduation from the Grammar Schools. I have often observed classes where the children were obliged to strain their eyes in using their slates or in reading from the blackboard. Frequently this might be avoided by a proper disposal of the blinds but it is often owing to the defective lighting of the room. This subject has received much attention of late years in Europe, and there are in Austria strict laws regulating the seating and the lighting of the class-rooms, with special reference to this tendency to near-sightedness.

Many of our classes, too, are yet overcrowded, and others are so situated as to make it a matter of great difficulty to ventilate them thoroughly, especially in unpleasant weather. Teachers and pupils are thus constantly drawing in the seeds of disease. There is no doubt whatever that a resolute and observant Principal can reduce this evil to a minimum. I could mention one Grammar School in the Department where pure fresh air is the rule and not the exception in every class, and I have often wished, when my olfactories have unpleasantly reminded me of the difference between the air of the school-room and that of out doors, that all Principals were equally enthusiastic on the subject of a pure atmosphere.

I would respectfully suggest that a careful and complete inspection of all the class-rooms of the Department by a competent committee, with special regard to sanitary conditions, would probably be the means of great improvement in this regard. The relation of the school-room to the physical well-being of the scholar has not received its due consideration in these days of apparent progress and large discussion of educational matters, but it is gratifying to observe an increasing interest in the subject. The able and suggestive essay upon School Hygiene, lately read by a member of the Board before the State Association of Teachers, should be placed in the hands of every School Trustee in the State, and it could not fail to produce excellent results.

#### GENERAL CONDITION OF THE SCHOOLS.

In a very great majority of cases I have found the condition of the classes of the department to be quite satisfactory, both as regards discipline and instruction. The uniform obedience and attention of the pupils, the neatness of their personal appearance, their readiness to oblige and their ease of manner in the presence of visitors, whether of strangers or school officers, certainly reflect great credit upon the teachers of the Department, and show that their efforts are directed not only to the intellectual instruction of the pupils under their charge, but also to their training in other important respects. I believe that one of the most valuable results of our Public School System is the ele-



vating influence which is thus brought to bear upon the children of our city by a corps of cultivated and refined teachers to induce habits of order, promptness, neatness, obedience and self-respect, habits which cannot fail to make them better and happier in their future lives.

#### NEW TEACHERS.

According to my observation the quality of the work done by teachers newly elected into the Department is considerably superior to that of previous years. The new teachers have shown a degree of industry, conscientiousness, docility and natural aptitude which promises well for their future success as teachers and which compels me to conclude that the present method of selecting teachers is an improvement upon that of previous administrations. In not a single case thus far have I felt justified in withholding the certificate of success required from the Deputy before the final election of a teacher.

#### NORMAL MEETING.

I have also already observed the good effects of the semi-monthly normal meeting of inexperienced teachers, and I heartily approve the action of the Board in still further extending the list of those obliged to attend. It is highly gratifying to notice that the great majority of the teachers in attendance—and a considerable portion of the attendance is voluntary—regard the normal class as a desirable means of improvement and not a wearisome task.

#### MANNERS OF TEACHERS IN PRESENCE OF THEIR CLASSES.

As a general thing, I have noticed that teachers, in the presence of their classes, are careful to preserve a demeanor at once dignified and kind, to treat their scholars with due respect, to use correct language, and in all regards to act as exemplars as well as instructors of their scholars.

I am compelled, however, to refer to exceptions to these general characteristics which have occasionally struck me during my inspection of classes, and which ought to be at once amended when attention is drawn to their existence. Teachers are not all careful enough to use good English in their intercourse with their pupils and with each other. For all practical purposes the *study* of grammar might be entirely abolished, if children never heard other than pure English from those about them. It is well enough to teach them the principles and the use of their mother tongue from text-books, but it is of far greater importance that they should *never* hear a solecism from the lips of their teacher. I have often heard teachers use incorrect expressions, sometimes, perhaps, from thoughtlessness, but frequently, I fear, from a want of

study and reflection. The habit, too, of speaking disparagingly of a class, or of individual scholars, which is too often practiced, is very much to be condemned. Encouragement and praise will do far more in stimulating the interest and industry of a pupil than impatient blame or harsh abuse. I know very much may be excused to the nervousness of an overworked and tired teacher, but a calm reflection upon the unspeakable value of self-control and patience in forming the minds and dispositions of children will obviate much of what is here condemned.

#### UNWISE SUSPENSIONS OF PUPILS.

It seems to me that the suspension of small children by primary Principals is a practice which is simply a confession of weakness and inefficiency. The majority of such cases could undoubtedly be settled by a judicious combination of kindness and severity, and should not be referred to the Superintendent or his Deputy.

#### INSTRUCTION IN FOREIGN LANGUAGES.

My observation of the classes where French and German are taught, not by special but by the class teachers, leads me to the conclusion that this method is entirely successful; and I feel convinced that where such teachers keep in mind their peculiar duties, and continue to improve themselves in the study and practice of their special languages the results will be far superior to those of the former plan. A constant and thorough inspection of such classes by Principals will undoubtedly tend to keep them up to a satisfactory standard.

#### THE SPANISH LANGUAGE.

In this connection I would respectfully call your attention to the advisability of providing at least in a single grammar school, means for thorough instruction in the Spanish language. If it be conceded, as it seems to be, that it is right to use the public funds for instruction in any foreign language, I submit that a knowledge of Spanish is much more directly valuable to the young men of this city than that of either French or German.

It has always been a subject of surprise to me that so small a percentage of the trade of Mexico and the South American republics has belonged to this city, so admirably situated, and so naturally calculated to control it. Doubtless some reason for this is to be found in the apathy of our moneyed men, and perhaps in the absorption of so large an amount of available capital in the lines of mining and other speculation. But it is undoubtedly true that those who are personally engaged in this trade, notably Germans, Hollanders and Englishmen, have mostly received thorough instruction in the Span-

ish language in the commercial schools of Europe, and I have no doubt that this acquaintance with the language is of vast importance in aiding them to acquire the confidence and the custom of the Spanish-American race. A single instructor is all that is necessary, and I believe the expense of such instruction would be returned to this city a hundred fold within a few years. I would propose that a boys' grammar school be selected—the Lincoln, for instance—and one class in each of the first, second, third and fourth grades be designated as a Spanish class. Let a competent Spanish teacher give instruction one hour each day in each class, and let the study of Spanish be made obligatory on every boy in the class. Scholars who do not wish to study the language could be placed in other classes of the same grade, and the English course for the Spanish classes could be somewhat modified to suit the allotted time. If this step even required the curtailment of French or German in one or two of the outside schools, still, I believe it would be wise economy.

#### HALF-TIME CLASSES.

I regret exceedingly that it has seemed necessary to close, or rather to expand into all-day classes, the half-time classes which had been inaugurated during 1877. Perhaps the time has not come for a successful application of the principle in this community, but I am still confident that the plan is a good one, and that the time will come when it will be universally admitted. In other cities the subject is now exciting much discussion, and the opinion is daily gaining ground that three hours' school a day for young children is quite long enough. It is certainly true in this department that, according to the testimony of the teachers, and also, according to my own observation, the actual progress of the children in these classes was fully equal to that of those in all-day classes.

The truth seems to be that the half-time classes were not generally popular with parents, although I am personally aware of the fact that a large number of parents were entirely satisfied with their children's progress. Doubtless much of the discontent has arisen from the wish of the parents to have their little ones in safety and out of the streets for a longer portion of the day; and, again, there is certainly some force to the argument that for very many little children the school-room is the pleasantest and the healthiest place they can be in. But, given the condition that children from six to eight are not in the way and are well cared for at home, I believe that their physical health and the best results as to their school work, as well as a great economy in the use of school accommodation, would be best secured by the half-time system.

## READING.

I believe that of all the subjects of instruction in our schools, nothing is so poorly taught as reading. In very many classes it is quite the exception to find a scholar who reads in a clear, natural tone, and as if he understood what he was reading and wished to convey its meaning to those who heard him. Almost always a few such good readers are to be found in a grammar class, and the wonder is that the teacher does not see the difference between such reading and that of the ordinary pupil, and try hard to bring the majority at least up to the same standard.

The prevailing faults are these: Scholars read without due understanding of what they are reading; they do not articulate clearly and distinctly; the inflections of their voices are uniformly mechanical; they read very often in a strained voice, above their natural one, and again in a lower tone than is natural, so that they cannot be easily heard. The first of these faults is partially due, in some cases, to the uninteresting and often unintelligible character of the reading lessons. A large proportion of the lessons in some of the school readers are simply unmitigated bosh, and others are far above the comprehension of the pupils.

But, admitting this, the responsibility for the remaining faults lies wholly with the teacher. She can require a clear articulation, and can teach her scholars to endeavor to express the meaning of what they read, and let the inflections take care of themselves. It is a fact many teachers in the department insist always on the rising inflection at a comma, regardless of the sense; and I have repeatedly heard a teacher oblige a child to read a sentence wrongly, when the natural sense of the scholar had led him to give a falling inflection at a comma. No pupil ever learned to read well *by rule*. It is only by imitation of the teacher's manner and from understanding clearly what he is reading that the scholar can read in a natural and pleasing manner. The order of the Classification Committee that much more time and attention be bestowed upon reading has already borne good fruit, and I sincerely trust for a marked improvement in this respect during the coming year. I cannot close this subject without condemning the practice of forcing children to read in an unnaturally loud voice. It is not pleasant to hear, in the first place, and secondly, it certainly results in permanent injury to the voice. Let the scholar articulate distinctly, and he will be heard quite well enough using only his natural tone.

I would suggest that in the good time coming, when all books shall belong to the school, two or three different sets of readers be provided for each class, so that when the pupils are tired of one reader, another may be taken up for awhile, and a new interest excited in the class.

## SPELLING.

I am firmly of the opinion that a spelling-book is a nuisance, and I agree fully with Samuel Eliot, the lately elected Superintendent of the Boston schools, when he says that "a spelling-book *blocks* the way it seems to open." In my own experience as a grammar school teacher, I discarded the spelling-book and drilled my scholars only on the words of their readers and of their other text-books, thus never obliging them to learn the spelling of a word they did not use and whose meaning was not familiar to them. I believe this to be the natural and reasonable way to give children a knowledge of the words of a language. The word-book now in use in our schools could be used with very great advantage in a First Grade class for the study of words, their meaning, use in sentences, pronunciation and orthography, but as a spelling-book, pure and simple, and particularly in the lower grades, I believe it is out of place.

There is a great deal of hard work done by our teachers in teaching spelling, and as a general thing the scholars spell quite satisfactorily. I have found in some classes, however, methods of instruction in this branch which it seems to me are decidedly unwise. Little children of the Sixth and Fifth Grades are obliged to commit the entire list of words at the head of the spelling lessons and to recite them *seriatim*, and in spelling words they are made to state after each word the number of syllables belonging to it. After considerable discussion in educational journals upon this subject, it seems to be the opinion of the intelligent majority that in oral spelling, the best and most expeditious method is to give the letters of the word, pausing between the syllables, but *not* pronouncing them. In this opinion, I fully concur, and I have been much gratified with the result of the instruction in spelling in those grammar classes where the teachers have pursued this plan.

## ARITHMETIC.

I have noticed a decided improvement in the instruction in this branch of study during the past year; more attention is paid to drill in the ground rules and less to long-drawn and tedious analysis. The introduction of text-books has enabled teachers to get a great deal more practical work out of their scholars, and it seems probable that scholars will hereafter enter the Grammar Grades with a better command of numbers than heretofore.

## GRAMMAR.

As a general thing I have found the instruction and the progress in this branch to be highly commendable. It is probable that the introduction of



the text-books into the lower grammar grades will be a saving of time and labor to the teacher. With a limited number of scholars and thoroughly competent and experienced instructors, text-books in grammar might perhaps be dispensed with without injury, but under existing circumstances I believe them to be desirable.

In the other branches of instruction the progress of the pupils in the Department has been quite as satisfactory as could be expected. In so large a number of classes there will of necessity be a considerable diversity of condition in various respects, but the careful and untiring efforts of school officers and of Principals are constantly directed towards the improvement and unification of the Department as a whole. I cannot close my report without expressing my favorable opinion of the condition of the schools as regards music and drawing, two branches of instruction so often erroneously considered as purely ornamental and superfluous, but which are as really practical as any other two divisions of the school curriculum.

The comparatively recent order of the Board requiring the regular and systematic practice of physical exercises has been of great benefit. Twice every day, at the same hours, all the classes in the Department are thrown open to the outside air and the pupils are required to practice for five minutes, a series of movements which are calculated to expand their lungs, and quicken their circulation and thus obviate the effects of too close attention to their lessons and of the physical inaction which is necessary to the quietness and order of the class.

During the past year four of our fellow teachers have fallen at their post, two of them after long years of labor in the educational field, and two who were but yesterday graduated from our schools, and who all too eagerly entered the ranks of workers, anxious to do what they could for those who had so long sustained and cherished them. After a brief period of earnest and effective school work they have laid down their bright young lives at the very outset of their career.

I acknowledge gratefully the assistance which I have uniformly received during the past year from yourself, from members of the Board and from Principals and teachers in the prosecution of my peculiar duties.

Respectfully submitted,

DUDLEY STONE,

Deputy Superintendent.



## REPORT OF PRINCIPAL OF BOYS' HIGH SCHOOL.

---

Boys' HIGH SCHOOL,  
San Francisco, August 31, 1878. }

A. L. MANN, *Superintendent of Public Schools:*

MY DEAR SIR—I have the pleasure of herewith submitting to you my first annual report.

Much has of late years been said by the press, and there is an ill-defined feeling among some members of the community, against public High School education. By some the feeling is honestly and intelligently, entertained. The ground of opposition seems to be three-fold, and to be wanting in consistency. Some hold the opinion that the higher education is a luxury, and should be enjoyed, if enjoyed at all, as other luxuries are, by those who are able to pay for it. Others think that the middle and lower classes are educated above their position in society, and are, therefore, educated to discontent, if they pass beyond the grammar school. Still others object that High Schools are maintained at public expense for the educational support of the children of the wealthy; that, in fact, the middle and lower classes are not largely represented in the High School.

I have thought that it might, perhaps, be proper and worth the while to present some of the reasons that lead others to hold different views from those expressed above.

As regards California, the question would seem to be, hardly a legitimate one for discussion, so long, at least, as the University is supported by the State. No one would care to be so illogical as to oppose public High Schools for either of the above named reasons, and yet defend a State University; to advocate State support of a school in which a liberal education is to be completed, and yet refuse support to the schools that fit for this higher school. But the mere fact that the higher education is now supported at public expense is a very insufficient reason for continuing that support. I shall mention, as briefly as I can, some of the reasons why this support should, as it seems to me, be continued.

To an American, caste, or anything that tends toward caste, is offensive. Every one feels that the prizes should belong to those who honorably win

them, and that the avenues to success should be thrown as widely open as possible, and every movement that looks toward closing these avenues, or toward making them more difficult of approach, is looked upon with suspicion and aversion. This is especially and very properly the case as regards education. Wealth is often a matter of good fortune, or luck, as we term it, and position in society, and positions of honor and trust, often come of wealth alone ; but the prominence and success that come of mental superiority come without wealth, and are superior to it. And to the boy of poor parents there is no way to distinction or eminent success, except through superior industry and mental capacity. To say, then, that the higher education should be practically closed to the poor man's son is to say that there should be an aristocracy of education, to which only the wealthy can hope to attain.

The still more practical question, and the point upon which the whole discussion should turn, is, To what extent is the State or community benefited by this higher education ? Is it worth to the State what it cost ?—for the State can have very little to do with questions of sentiment. The State idea is commercial rather than paternal. The question has never arisen, and probably never will arise, as to the advisability of education at public expense up to the point of giving to every person the opportunity of becoming an intelligent citizen capable of decent self-support, provided there is anything to him. In fact, State education was established among us as a means, and as one of the best means, of securing stable republican government. Even imperial governments are coming to look upon a high average of general intelligence as one of the best safeguards against anarchy and communism. But if a high average is good, is not a higher better, and if a high average at public expense is good, is not a higher at public expense better. Provided the subjects taught are kept within proper bounds, I cannot see why the argument should not be carried to its legitimate conclusion. Reading, writing and arithmetic are certainly not more necessary to the unskilled laborer than the higher branches are to the skilled laborer, and it will certainly not be claimed that the unskilled laborer is a more important factor in a commonwealth than the skilled laborer. And so of other callings. Each is necessary to the community, and the value of any one calling is in proportion to the skill and intelligence necessary to success in it. If, then, the State assumes to bring the unskilled laborer to the threshold of his life work, it would seem but an act of consistency that the skilled laborer should be brought to a like point with reference to his work, and the more so since such an act is in the highest degree consistent with the interests of the State. But not beyond that point, for the moment a man enters upon a special preparation for his trade or profession, he begins to utilize his abilities for his own special benefit. His trade or profession is his stock in trade, his capital, and should no more be furnished him at public expense than the merchant's stock of dry goods.

But these higher opportunities should be limited, and to the fact that they have not been limited can be traced, as it seems to me, the cause of some just complaint. An indiscriminate attempt to give the higher education to every boy who has an indefinite kind of an idea that he would like it, or to encourage him to attempt it, seems to me wrong. No amount of the highest skilled labor can make a diamond out of a piece of charcoal, and the labor spent in the attempt is thrown away. We are constantly spending useless and expensive labor in the attempt to give the higher education to boys who are either incapable of it, or what, as far at least as the State is concerned, is almost an equivalent, who have not the slightest taste for or appreciation of it. If the efficiency of the grammar schools were increased by the addition of perhaps another year, so that pupils should leave them sufficiently advanced to give some indications of their aptitudes, and if admission to the High School were made so difficult that only promising boys could hope to enter, and if we insisted on such scholarship after entering that only promising and industrious boys could remain, such a sifting process would lessen the numbers in our High Schools, as I think they should be, and so very materially lessen the expense of maintaining them, and that, too, without doing any injury to any one. I presume that from ten to fifteen per cent of the pupils of every High School are getting little and will never get much benefit from their course. It is certainly very desirable that unpromising boys, or boys without application, should have good educational advantages, but not in the higher schools at public expense.

Again, no complaint would ever be made that the middle and lower classes are being educated above their positions in society if this course were taken. A bright and energetic boy rarely, if ever, feels that he is educated above whatever work he may have to do or whatever position he may have to fill. It is the conceit bred of incompetence that leads the possessor of it to think that he is really fitted for better work than he can get, because he has had opportunities that should fit him for better work.

The objection that High Schools are supported at public expense for the educational support of the wealthy is answered by the following loose classification of the occupations of the parents or guardians of most of the boys attending school this August 26, 1878. From some families two boys come; a few boys were on that day absent, and others have neither parents nor guardians. This accounts for the fact that out of an enrollment of three hundred and thirty odd boys, only three hundred parents are represented.

Agent.....	10	Capitalist.....	6	Cashier.....	3
Agitator.....	1	Collector.....	2	Traveling salesman.....	1
Accountant.....	1	Carpet beating.....	1	Doctor.....	8
Boiler inspector.....	1	Chemist.....	1	Dressmaker.....	1
Bookkeeper.....	3	Clerk.....	3	Druggist.....	1
Barber.....	2	C. P. R. R. employee.....	1	Draughtsman.....	1
Banker.....	1	Coiner at Mint.....	1	Deputy Sheriff.....	1
Consul.....	1	Contractor.....	4	Editor.....	3

Engineer.....	1	Livery stable proprietor... 1	Photographer.....	1	
Expressman.....	1	Longshoreman.....	1	Porter.....	1
Fruit and vegetable dealer. 1		Merchant.....	42	Real estate agent.....	3
Fruit packer.....	1	Mechanic.....	32	Restaurant keeper.....	2
Farmer.....	3	Manufacturer.....	11	Salesman.....	2
Foundryman.....	3	Mining.....	3	Stevedore.....	4
Fish dealer.....	1	Marble dealer.....	1	Sea captain.....	3
Grain dealer.....	1	Milkman.....	2	Secretary.....	7
Gate keeper.....	1	Minister.....	1	Stock broker.....	6
Gardener.....	2	Mint.....	1	Ship owner.....	1
Grocer.....	3	Messenger.....	1	Silversmith.....	1
Hotel keeper.....	5	Master mariner.....	1	Teacher.....	3
Hay and grain dealer.....	1	Money broker.....	1	Tobacco and cigars.....	4
Hardware.....	1	No occupation.....	36	Teamster.....	4
Judge.....	1	Nurse.....	1	Tailor.....	1
Jeweler.....	2	Optician.....	1	U. S. Army.....	1
Liquor dealer.....	5	Paper carrier.....	1	Wharfinger.....	3
Live stock dealer.....	3	Paints and oils.....	2	Whitener.....	1
Lawyer.....	8	Proprietor water works... 1		Wool grower.....	1
Lumber dealer.....	4	Police officer.....	1	Wood and coal dealer.....	1
Laborer.....	2	Pilot.....	1		

On further inquiry I found that of the thirty-six boys who report "no occupation" for parents, eighteen have no fathers, the fathers of four are in ill-health and two live from the rent of real estate. Of the remainder some are in no employment because of the difficulty of obtaining it, while others have some property, but not enough to be classed as capitalists.

But while I cannot look upon the so-called higher education as a luxury to be enjoyed only by the wealthy, I certainly think that there are luxuries in education and that it is quite proper that they should be enjoyed only by those who wish them enough to pay for them. Under the head of luxuries I should class all the so-called accomplishments; all studies that do not contribute to the mental training or to the knowledge necessary to bring the mind of the promising boy into the mental symmetry that will enable him to take hold of whatever may be his special work with proper mental vigor. Such studies no longer have a place in our High Schools. I do not question that the community is in the highest degree benefited by its literary men, its men of culture and refinement and its specialists; but it is better off for them in the same way, though to a higher degree perhaps, that it is better off for its doctors, its lawyers, its blacksmiths and its farmers, and can no more assume to give the necessary special training to the one than to the other.

I do not question the desirability of supplementing a State University course by special courses. Nor do I question the value to a community of schools and academies in which the so-called accomplishments are taught, and yet I think that the opponents of state support of such schools are justifiable in their opposition. But opposition to state support need not and should not extend to opposition to state encouragement by supplementing private munificence or private enterprise in a matter of so great a public

good. It would certainly seem as enlightened a measure of public policy to encourage enterprises or institutions that educate the brains that are to put on foot and carry out great enterprises as to protect these enterprises by tariff and encourage them by subsidies.

Special incitements to study and to scientific pursuits are especially desirable in a young and vigorous community, with every prospect of a brilliant business future, as is the case with California, and such communities are precisely those in which wealth has not had time to sober down, and where it is not so likely as in old communities to appear in great public benefactions, and where, in consequence, public encouragement is desirable, for great private liberality for public good comes only from wealth in the hands of men of culture or clear-headed business men of the broadest sympathy with culture and of great public spirit. I have dwelt on this subject at questionable length because I hope to be able to contribute something to the formation of an intelligent public opinion on a matter that does not seem to me to have been well thought out, and about which it is important that there should be an intelligent opinion. The limitations of life and opportunity, and the necessity that most boys are under to make their own way in the world, make it quite proper that some limit should be placed upon public education. In the discussion of the question by the press and by the public, it seems to have been assumed that the only way to limit what might become an educational abuse is to abolish the thing itself. I have tried to show what the limitations should be, and that within those limits the highest public interest demands the higher education at public expense.

#### COURSE OF STUDY.

More is required in our course of study than can be properly done by boys of the age and development of many of the boys that come to us. I think that it would be wise either to lengthen the course a year or to increase the requirements for admission to the extent of another year in the Grammar Schools. The only other remedy possible is to grade rigidly according to credits, a thing that has always heretofore been attended with more or less irritation and discouragement, because of the great difference in grades, and doubtless sometimes the best interests of one or two boys in a class are not best consulted. The very wise action of the Board, in authorizing the formation of grades but six months apart, will, I have no doubt, almost entirely remove the evils of rigid grading, and at the same time enable us to accommodate the lessons to the pace of the readier boys, without doing an injury to the slower. If now, at the end of any six months, or, indeed, if at any time, a boy is found unable or unwilling to do the work of his grade in a way quite satisfactory, his removal to a grade lower is but a loss of six months to him in time, and it gives him an opportunity to review the work on which he is immediately



deficient, without compelling him to go over a long course in which, though deficient, he is likely to lose interest. It is difficult to estimate the value of this flexibility, but still I cannot but think that the interests of the pupil and the school would be better served if pupils were not admitted until they are well fitted for High School work, both as regards age and acquirements. We otherwise endanger one of the most desirable objects of a good elementary education—the formation and cultivation of something of a taste for and an appreciation of books and knowledge.

The establishment of a Sub-Junior Class, to which boys who wish to prepare for the Classical Department of the University may come from the second grammar grade, will to some extent relieve the pressure heretofore felt in the Classical Department; but it would be better for the boy, I have no doubt, to graduate from the grammar school, and then spend four years in preparation for college. I cannot but look upon the attempt of an immature boy to do the mental work of a vigorous young man as a thing in every way to be discouraged. We certainly require more work in this, as in our English Department, than the average boy can assimilate in the time given to it.

#### FRENCH AND GERMAN.

Notwithstanding the fact that we have in Mr. Levy a very accomplished French and German scholar and an excellent teacher, our work in French and German, previous to the present year, seems to me to have been substantially a failure. The failure, if it was such, was due in a great measure to the fact that we have never had a well defined and single object in view. We have tried to do two things, neither of which could be well done in the time at our disposal, and one of which, even if well done, would be of little or no value to the pupil, and to this comparatively valueless part we have given not a little attention. I know that I shall do violence to a wide-spread opinion when I say that the attempt to teach French and German as spoken languages during the ordinary school life of a boy or girl is an outrageous waste of time and energy, and that the result always has been and always will be utterly ridiculous. And to dwell upon the commercial or social value of a spoken language to the boy who can with the greatest difficulty, if at all, turn the stilted sentences of most conversational text-books into bad French and worse German, is worse than ridiculous—it is pitiable. I do not include in this discussion pupils whose parents are French or German, and who therefore read and speak these languages as their native tongue.

I can hardly say more for the study of these languages, for the purpose of opening up a wider range of literature to the High School pupil. What can be more absurd than to propose to open up a wider field of literature to a young man or a young woman, when he knows little or nothing of the literature of his own language. And the absurdity reaches the highest point



when one reflects that not one graduate of a High School in fifty, probably, ever attempts to read a French or German book after leaving school—for the very satisfactory reason that he cannot do it with any satisfaction.

The very pertinent question will be asked, of what value is the French and German learned in the High School? My reply is, of little or no value, except as contributing to a better knowledge of English, but of the greatest value for that purpose. I know of no way by which a boy or girl is so likely to get a good command of English and a nice appreciation of the force and value of the right word in the right place as by turning good idiomatic French or German, or any other foreign language, into good idiomatic English, and the time spent on French and German would be well spent if there were no object in view but the attainment of a better command of English. Whatever proficiency the pupil gains in the language itself, I look upon as so much clear gain, but as rather aside from the main purpose of the study. It seems to me quite time that we had done with this straining after the so-called refinements of education, until we have a good knowledge of the substantial. The ability to read, write and speak good and forcible English is, after all, or should be, a central, if not the central, object of all public school education, until it is attained. The action of the committee, in distinctly abandoning all attempt at attaining proficiency in speaking French and German, seems to me matter for congratulation. How successful we shall be in doing the new work laid down in the course of study yet remains to be seen. Pupils are not thus far doing as well as we could wish.

The option of substituting equivalent work in word analysis and English literature for French or German has not thus far been a good thing. It has not been practicable, this year, to carry the option into the Senior and Middle Classes, nor was it at once made known in the Junior Class; otherwise a greater number would probably have elected the English course.

This substitute course has in many cases, I am sure, been selected instead of the course in French and German, because it is presumed to be the easier of the two, and I am yet frequently petitioned for permission to change, on the ground that the pupil is not doing well in his French or German. I am of the same opinion with the boys, that the course is neither as difficult nor as profitable as the French or German course. I hope, however, in some measure soon to remedy both of these defects. That course will certainly be the more popular which is thought to be the easier. It is desirable, therefore, that there should be little choice in this respect.

#### ENGLISH LITERATURE

Of all the work in the school, the work in this department seems to me the most difficult to manage. It is not difficult to determine what should be done, but almost impossible to know how to do it. The attempt to teach

criticism, to analyze styles, the dwelling upon the refined beauties of this author's style and thought and the grandeur of another's, are entirely aside from our purpose, as being either affectations or indications of a serious want of judgment. It certainly is a discouraging thing in education to think that there is often so little judgment in discriminating between studies and aims excellent in themselves and those suitable to the ages, acquirements and purposes of the pupil. We are trying to make the work in this department contribute to the boy's command of English, to arouse and cultivate in him something of a taste for reading, and, if possible, for general literature, and to combine with it, as of perhaps secondary value, some knowledge of authors and of the works they have written. Our indifferent success in making the work of the greatest value as a means of bettering the pupil's command of English is due to the fact that we do not have (and I know of none) a suitable text-book in that line of work, and that it is utterly impossible for a teacher to prepare, give out and correct when returned, the number of exercises necessary to the greatest success. To make our course more of a success in stimulating a desire for reading, our library should be supplied with several copies each of different works on subjects within the range of the pupil and of an entertaining character, and the reading of these books, and the preparation of compositions on them, should form a regular part of the course. I should as soon think of arguing the point that to learn to swim a boy must go into the water, as to argue that to form a taste for literature or reading a boy must have some acquaintance with literature through reading. I hope later to be able to submit to you, and through you to the Board, a list of books for this purpose. The use of Charles and Mary Lamb's "Tales from Shakespeare," now in the hands of the Junior Class, is a most excellent beginning in this direction.

#### DRAWING.

There are some sixty odd pupils in drawing. To those boys the course is doubtless valuable and enjoyable. I am not, however, settled in my opinion as to the propriety of elective studies in a High School, unless they are substitutes for other studies of the same kind and of a general educational value. It seems to me questionable whether work of this kind, and so advanced, does not pass over into either an accomplishment or a specialty.

Our course of study seems to me in other respects to be very satisfactory. Better text-books, however, than some now in use could be obtained and at less cost.

#### TRUANCY AND DELINQUENCY.

There have been several cases of truancy in the school during the past year. I am quite of the opinion that truancy in the High School should be dealt with in a very summary way. High School privileges should be at a premium, and should not be granted to an unappreciative and unprincipled boy. I should be glad to see the rule adopted that, after a parent has been

once warned of the truancy of his son, a second offense shall be followed by permanent suspension from school. The public certainly cannot assume to look after a boy of the High School age who cannot be managed by his parents, except as a measure of self-protection.

It would seem but just, too, that pupils who have been for two years in the same grade without receiving promotion should be denied the privilege of longer continuing in the school. If a boy is unable to do the ordinary work of one year in two, it is his misfortune, and it is a favor to him, if a poor boy, to be kept from a course which is to be of little profit to him, and if he will not do it he should not be allowed to continue. I think we are not likely to err on the side of efficiency.

A smaller proportion of pupils have thus far left school this year than during the same time heretofore, owing to the fact, doubtless, that the examination for admission was more thorough than usual and that its results were more closely adhered to, thus weeding out many pupils who would not have long continued if they had been admitted.

Following is a table in which will be found such statistics as seem to me likely to be of interest and value:

CLASS.	Number in class,.....	Average age..... { Months Years..	Number who take Latin.....	Number who take Greek.....	Number who take both Latin and Greek.....	Number who take French.....	Number who take German.....	Number who take both French and German.....	Number who substitute English for French or German.....	Number who take Latin instead of French or German.....	Number who take drawing.....	Number who are not taking a regular course.....	Number of whose parents is French.....	Number studying French, neither of whose parents is French.....	Number of whose parents is German.....	Number studying German, neither of whose parents is German.....
Advanced Class.....	3 17 11	3 3	3	3	3	3	...	...	...	...	...	...	...	...	...	...
Classical Senior.....	14 16 6	13 13	13	...	...	...	...	...	...	1	1	1	...	...	...	...
English Senior.....	21 16 10	6	...	...	...	11	4	...	...	6	3	...	3	3	...	...
Classical Middle.....	29 15 8	28 23	23	3	1	...	...	...	...	...	...	6	3	...	...	...
English Middle.....	60 15 9	3	...	...	39	17	...	...	1	14	1	34	9	...	...	...
Classical Junior.....	65 15 0	65	...	...	11	1	...	...	...	9	...	5	1	...	...	...
English Junior.....	89 15 2	1	...	...	46	27	1	16	...	27	...	37	13	...	...	...
Sub-Junior.....	48 14 8	48	...	...	...	...	...	...	...	12	...	...	...	...	...	...
Total.....	329	...	167	39	39	113	50	1	16	7	66	8	83	26	...	...

Very respectfully submitted,

W. T. REID, Principal.

## REPORT OF THE GIRLS' HIGH SCHOOL.

---

A. L. MANN, *Superintendent of Common Schools,*  
*City and County of San Francisco.*

I herewith submit, in accordance with your request, a brief report of the Girls' High School, and of the Normal Class.

Very respectfully,

JOHN SWETT,

Principal Girls' High School.

---

### ANNUAL STATISTICS, 1877-8.

FOR THE SCHOOL YEAR ENDING JUNE 30, 1878.

Whole number enrolled during the year .....	898
Average daily attendance.....	705
Number of classes.....	21
Number of teachers .....	25

#### ANNUAL EXAMINATION.

##### Normal Class (1):

Examined .....	25
Graduated .....	25

##### Senior Classes (4):

Examined ..	165
Graduated.....	154

##### Middle Classes (7):

Examined .....	221
Promoted .....	195

## Junior Classes (9):

Examined .....	286
Promoted .....	260
Failed of graduation.....	11
Failed of promotion.....	52

## PRESENT CLASSIFICATION (SEPTEMBER 3, 1878).

## WHOLE NUMBER ENROLLED.

Normal Class (1).....	74
Senior Classes (5).....	200
Middle Classes (7) .....	275
Junior Classes (8).....	280
Total.....	829

	PROMOTED ON EXAMINATION.	PROMOTED ON RE-EXAMINATION BY ORDER OF COMMITTEE.	FROM OTHER SCHOOLS.	HOLD-OVERS FROM LAST YEAR.
Normal Class.....	63	1	10	0
Senior Classes .....	175	13	4	0
Middle Classes.....	240	12	12	16
Junior Classes.....	231	18	10	21
Totals.....	709	44	36	37

## LATIN, FRENCH AND GERMAN.

The number of pupils pursuing the languages last year, as compared with the number this year, is exhibited by the following table:

	FRENCH.		GERMAN.		LATIN.	
	1877-S.	1878-9.	1877-S.	1878-9.	1877-S.	1878-9.
Normal Class.....	0	20	0	14	5	11
Seniors.....	41	49	14	6	17	2
Middles.....	82	90	11	19	11	9
Juniors.....	141	40	16	32	17	11
Total.....	264	199	38	71	50	33

## DRAWING.

Since drawing has been made optional, instead of compulsory, the results are much more satisfactory. Only those take it that have a taste for it, and they improve. The number taking drawing lessons is as follows: Seniors, 79; Middles, 105; Juniors, 165. Total, 349.

## SCHOOL ACCOMMODATIONS.

Last year the distribution of pupils in three buildings, each a mile distant from the others, was a great disadvantage to the school. Aside from the loss of time by Principal and special teachers in traveling a daily round of three miles, no number of scattered classes can constitute a *school* in the full sense of the term.

This year the concentration of the classes into *two* buildings is an improvement, but the building on Powell street is so remote from the southern part of the city that some of the pupils promoted from the grammar schools have found it impossible to attend. There is a pressing need for a centrally located building capable of accommodating 1,200 pupils.

## COURSE OF STUDY.

The course of study was materially improved last June by the authorization of text-books in arithmetic, grammar, rhetoric and literature. The cutting out of zoology and the substitution of physiology was a step backwards. Drawing, French, German and Latin are optional, as they should be. Geometry should be made an elective study, with an offset of literature or science. To a majority of the girls, the study of four books of geometry, never to be further applied, is a piece of drudgery, not altogether useless, but far less useful than several other studies that might be selected. The schoolmaster's dictum, of pursuing a study merely for the sake of mental gymnastics, is exploded among modern educational thinkers.

For girls intending to pursue an advanced course of study in the State University or in some other college, geometry is both necessary and useful; but it does not logically follow that the best thing for girls to do whose school education ends with the High School is to take up four books of geometry, and then drop the study. The sound sense of many parents on this question is in advance of the opinions of most schoolmasters. Applications are often made to have girls excused from wasting a year on geometry; but, as the omission of this study would involve the loss of a diploma of graduation, it has been impossible to excuse them.



## LEADING OBJECTS.

One main purpose of the Girls' High School, during the past two years, has been to graduate girls well trained in the essential elements of a sound English education. Every class—Junior, Middle, Senior and Normal—has taken, for five months in the year, a thorough review of arithmetic, grammar, spelling and defining and geography. In the case of many pupils, so limited was their knowledge, or so completely forgotten, that these reviews constituted instruction *de novo*.

It is a notion entertained by some High School teachers and by a few parents, that arithmetic and grammar are not "High School studies." They assume that these studies are "finished" in the grammar school. Now, pupils acquire only the *elements* of these studies in the grammar schools. A thorough knowledge can be gained only by continuing them in the High School. Grammar is essentially a High School study.

As far as consistent with the established course of study, it is made the aim of the High School to graduate pupils with:

1. The ability to read well and spell well.
2. A fair knowledge of English grammar.
3. Some knowledge of the meaning and use of words, of etymology and of synonyms.
4. A practical and an analytical knowledge of arithmetic.
5. The required amount of algebra and geometry.
6. Some knowledge of physical and political geography.
7. A general knowledge of the history of the world.
8. Some knowledge of *what* to read in English literature, and *how* to read it.
9. The ability to express their thoughts in correct English, gained by actual practice in composition—writing, rather than by a study of technical text-books on rhetoric.
10. An elementary knowledge of physics, chemistry and botany.
11. Some knowledge of physiology and of the laws of health.
12. Some training in vocal culture and vocal music.
13. An incidental elementary knowledge for those who desire it, of Latin, or French, or German, or drawing.

## PHYSICAL TRAINING.

Physical education is mainly a matter of home surroundings. It is impossible for teachers to control or regulate matters of diet, air, exercise, sleep, clothing, etc., but there are some things for which the school is responsible. These are mostly of a negative character. School lessons ought not to be so

long and so numerous as to wear out the eyes of pupils or exhaust their nervous vitality. It is possible, also, to have some positive physical training in school.

In the High School the calisthenic exercises consist of daily drills with dumbbells and wands, or of free gymnastics and vocal gymnastics. One drill of five minutes is given at 10 A. M., and another at 2 P. M. This drill has a tendency to prevent the round shoulders and stooping attitude, too often characteristic of school girls.

Every year from twenty to forty girls break down in health and leave school. What is the cause?

Occasionally, mental overwork, but oftener, long continued violation of the laws of health in respect to diet, air, exercise, recreation, rest and sleep. The toughest constitutions must eventually succumb to hot biscuits, hot cakes, strong tea and strong coffee; to eating at all hours, and to sleeping in close rooms; to late hours and lack of sleep; to lack of exercise and lack of recreation. It seems to avail little that regular lectures on hygiene are given in school; home habits are stronger than school precepts.

#### WEAK EYES.

From one-third to one-half the girls complain of weak eyes when they come from the grammar to the High School, but the percentage is smaller in the Senior Classes than in the Junior Classes. In the High School every precaution possible has been taken to prevent the increase of this alarming condition of the eyes. The desks have all been re-arranged so that the light is admitted on the left-hand side, and from only one side of the room. Girls whose eyes are at all troublesome are excused from study by gaslight, and, in general, evening study is discouraged. Still, girls ambitious to gain a high percentage habitually disregard all hygienic instructions. *The parents are responsible for ruined eyes, not the teachers.*

Undoubtedly the school course includes too many studies; but this is the result of public opinion, that insists on an extended curriculum. A girl of average capacity must study, in order to stand high in her class, at least two hours a day at home. Two-thirds of the High School girls take music lessons at home, and are required by their parents to practice from one to two hours daily on the piano. The wonder is, not that five per cent break down, but that so many survive this mental work of ten hours a day, without exercise or recreation.

#### THE NORMAL CLASS.

The number of graduates from the Normal Class in 1877, the first year of its existence, was 31; in 1878, 25; and the number now enrolled is 74.

The Normal Class is made up exclusively of High School graduates, and is

therefore a post-graduate course. Quite a number of girls not intending to become teachers have taken this course for the purpose of rounding off their High School course.

During last year there were three small training classes taught exclusively by members for the Normal Class. These classes were placed in three unoccupied rooms in the Powell street building, each class being limited to twelve pupils. The experiment was in every respect a success.

It is to be hoped that a fully organized training school may soon be established as an essential accompaniment of a Normal Class. The Normal Class was established in 1876, by a resolution introduced by Dr. O'Neill and supported by Mr. Tait. Its success is owing largely to the intelligent encouragement given to the graduates by the present Board and by Superintendent Mann.

There is a popular notion afloat that anybody who has had "an education," or who can get a certificate, is "fit to teach school," that there is no such thing as a *science* of education or an *art* of teaching.

This is not the opinion of educators, nor is it the public opinion of intelligent and thoughtful people. In Boston, Chicago, Philadelphia and New York, the primary schools are filled almost exclusively by graduates of local city normal schools. In many of the small cities in Massachusetts the primary teachers are obtained exclusively from the Normal Class connected with the local High School.

As a matter of fact, the greatest waste of money in our city primary schools comes from the employment of untrained teachers, who finally learn how to teach after a fashion, but who spoil a great many classes of little children before they learn to teach at all.

Unless teachers are trained to their business, there cannot be good schools. There may be the external show—there is no soul, no spirit, no healthful outflow of intelligent humanity.

The next educational step to be taken is, *the exclusive employment of professionally trained teachers*, and San Francisco ought to be the first place in California to take it. *It is a good time to economize by paying out money only to skilled labor.* The notice ought to be posted up: "NO EDUCATIONAL TRAMPS WANTED."

#### AGE OF PUPILS.

The average age of pupils is as follows:

CLASS.	YEARS.	MONTHS.
Normal.....	18	1
Senior.....	17	4
Middle.....	16	6
Junior.....	15	9

## STANDARD OF PROMOTION AND GRADUATION.

For several years past the standard of admission to the High School has been 70 per cent.; the standard of promotion in the High School has been 70 per cent.; and the standard for graduation has been 70 per cent. This standard is too low. It would materially benefit the school if the standard could be raised to 75 per cent. for admission, promotion and graduation.

A High School diploma ought to be awarded only as the reward of a fair degree of elementary education; and pupils incapable of attaining even the shadow of an education ought not to be allowed to drag their weary way through school — a tax on the public, a terror to teachers and a discredit to the school.

---

## THE HIGH SCHOOL AS A PART OF OUR SCHOOL SYSTEM.

At present, in all parts of our country, the High School is under the fire of sharp criticism. When times are hard, and taxes high, the school system is subjected to rigid examination.

Examination and criticism will result in good. If the old type High Schools are not in harmony with existing social conditions, they must be adapted to meet the demands of a newer education.

At first, in the United States, the High School was established as a preparatory school for college, and for many years the leading studies were Latin, Greek and mathematics. The study of the sciences was, by degrees, introduced into the course, and, finally, they were further modified to meet more nearly the wants of those who desired an academic, not a college course.

On the general question of maintaining High Schools as a part of our free school system the American people are sound. The very first school laws of Massachusetts and Connecticut required the towns to establish "Grammar Schools" and to employ "Masters" "capable of teaching Latin and Greek and of fitting boys for college." In our present stage of civilization and wealth it is no departure from the principles of "our fathers" to maintain High Schools.

There are a few iconoclasts who would abolish High Schools altogether, and reduce the free public schools to a condition lower than that of the "common schools" of Colonial times.

There are a few representatives of Caste of Capital and the Caste of Cul-

ture who seem to favor a monopoly of higher education by the few who can afford to pay for it. In times of social discontent and disturbances they assert that vice, crime, idleness and poverty are the results of over-education. They hold up the schoolmaster as a public enemy. In the age of superstition the masses were held in ignorance in order to keep them religious; in this age of machinery, the "common people" must be limited to reading and writing in order to keep them contented.

But the real cause of trouble is, the common people are under-educated, not over-educated. If education creates new wants, if it makes men discontented, it also stimulates them to increased activity. Discontent is the main-spring of social evolution.

Only timid and despairing souls are frightened with the belief that the foundations of society are breaking up on account of free school education.

The American people will as soon give up the right of suffrage as surrender the right of their children to a free public education from the Primary School to the College and through the University.

If the schools as now conducted fail to meet the needs of existing conditions, the *kind* of education, not the *extent* of it must be changed.

---

### LECTURES.

During the year, on Friday afternoons, a course of lectures has been delivered on subjects of special interest to the pupils.

Among the lecturers were:

Hon. E. S. Carr,  
Mrs. Sarah B. Cooper (3 lectures),  
Prof. W. T. Welcker,  
Supt. A. L. Mann,  
Samuel Williams,  
Prof. Austin Phelps,  
D. C. Stone,

Mrs. Jennie C. Carr,  
Prof. E. R. Sill,  
John. W. Taylor,  
Prof. W. D. Gunning,  
W. T. Bartlett,  
H. P. Carlton.

## REPORT OF THE COSMOPOLITAN SCHOOLS.

---

A. L. MANN, *Superintendent Common Schools*;

DEAR SIR--At your request I have prepared the following remarks on Cosmopolitan Schools, their present condition and future wants.

Respectfully,

A. HERBST,

Principal South Cosmopolitan Grammar School.

---

### COSMOPOLITAN SCHOOLS.

There are in this department four grammar and three primary schools generally called Cosmopolitan Schools. In some of these the study of French and German is pursued almost universally; in others, in a less degree. The following remarks are intended to apply principally to those Cosmopolitan Schools where the study of a modern language besides the English is carried on by the great majority of the pupils, and not to those in which the pupils who study either of these languages form the exception.

If we take into consideration the frequent alterations and experiments which these schools have undergone since their existence, the hostilities and attacks to which they have almost continually been subjected, and the want of systematic and uniform work under which they have always labored, it is, perhaps, surprising that they have produced any results at all; and if the results have not been as satisfactory and as general as the most sanguine could have desired, the reason must be sought in the obstacles just mentioned. Results there have been—and good results—or quite a number of former pupils and graduates of the Cosmopolitan Grammar Schools would not now be teachers of German and French in the public schools of San Francisco.

One of the chief objections to Cosmopolitan Schools has always been the extra expense which they involved. Not that the extra cost had been enormous, but still it was somewhat in excess of the expense of other schools.

The first attempt to lower the expenses was made two years ago, when,



during Mr. Bolander's superintendency, the Bush Street Primary School was so arranged that the instruction in German and French was given by the class teachers, and only by such teachers as held a German or French certificate besides their English one.

Pursuing the plan, the present Board of Education has made similar changes in other Cosmopolitan Schools. A measure was introduced recently according to which all primary classes in Cosmopolitan Schools must be taught by teachers thus doubly qualified, and, although it has not been possible yet to fill all such positions, for want of teachers who possess the necessary qualifications, yet a number of additional teachers have been appointed who can teach German or French besides English, and twenty classes in Cosmopolitan Primary Schools are now in the charge of teachers holding double certificates.

There are, of course, many persons, and even good, competent judges, who object to this plan, and who deny the efficiency of these teachers to teach German or French as well as native special teachers. Young ladies and gentlemen of German or French parentage, who had learned German and French here, and whose native tongue is English, can hardly be expected to have quite as pure an accent, to speak quite as correctly, and to have as good a knowledge of German or French literature, as those educated in France or in Germany; but their knowledge is probably sufficient to teach a primary class, and they are constantly improving as they go on teaching. A beginning must be made, and even if the saving of a few special teachers were the only advantage gained, it would be something. But these English teachers with French or German certificates possess one great advantage over most special teachers—they have better discipline than the average foreign teacher (I do not speak of all of them), and will, as a natural consequence, produce better results. Perhaps these results may not be a better pronunciation, but probably a better grounding in grammar and a greater fluency in translating.

The reconstruction of Cosmopolitan primary classes upon the plan just described having been but recently undertaken, it will hardly be fair to pronounce judgment upon its success; the results cannot be shown immediately, but, on the whole, the classes so taught seem to make good progress, and are in a fair way of proving a success.

A decided change for the better was made since the commencement of this school year by the adoption of other text-books, in German as well as in French. They were particularly needed in German, for the text-books formerly used were intended for the use of German-speaking pupils only, having neither vocabulary nor any other guide for those scholars to whom German was a foreign tongue. The teachers were compelled to dictate the vocabulary to their classes before an attempt at translation could be made, and in this way much valuable time was necessarily lost. The readers now introduced have a carefully compiled vocabulary, and the pupils can now be expected to look up the words of their reading lesson and come to their

recitations prepared to translate. The new series of Ahn's French and German books are a great improvement on the old books. Their arrangement is more methodical and systematic, and the exercises much more practical and more interesting to the pupils. The teachers expect to be able to produce better results, and the general progress will naturally be more satisfactory, especially in the case of pupils of American parentage.

By means of a judicious consolidation of classes, their number and the number of special teachers employed were somewhat diminished. Wherever it was found, for example, that in one class of some school the majority studied French or German, and in a similar class of a neighboring school the same language was only studied by a small number of the pupils, a saving was effected by transferring the English pupils of the former into the latter school, and the French or German pupils of the latter into the former; by this means a teacher for one class was saved, and at the same time a more uniform arrangement of classes brought about. This was done in a number of small French classes, which were transferred from the Hayes Valley Grammar School to the South Cosmopolitan and from the Greenwich Street Primary to the North Cosmopolitan Grammar. The services of two special teachers were dispensed with in this way and a further reduction was effected by taking the study of languages out of the Eighth Grades. This last measure is a particularly good one, not only from an economical but also from an educational standpoint. All educational authorities in Europe, and in Germany in particular, are agreed, that, at the time when children gain the first theoretical knowledge of their own language, it is not expedient to burden them with a second one. This second one is to be taken up in the second, or even third, school year, when the same results are pretty generally achieved in half the time.

The tendency is to save expense, and this must be one of the chief objects aimed at. The additional cost is always made the cause of objection to the Cosmopolitan Schools; and it will not do to have the same struggle for existence every time the Legislature meets. If these schools are once established on a firm basis, and the expense reduced to a minimum, they will be secure from further attack, provided that the advantage derived from the instruction in French and German is clearly shown.

The annual cost of the instruction in German and French, or the salary paid to German and French teachers in the Grammar and Primary Schools, was, during the last year, \$21,120, or 3 per cent. of the total amount paid for teachers' salaries. With the reductions already made, and those that will be made before the close of the fiscal year, this amount will be reduced more than one-half, and the whole cost will not exceed  $1\frac{1}{4}$  per cent. of the total amount of teachers' salaries.

It is thought by many that, if children at the public schools devote sufficient time and energy to make much progress in foreign languages, it must certainly be at the expense of their other studies. This idea is not borne out

by facts, as shown by constant experience and by the annual results of examinations.

The pupils of the Cosmopolitan Schools have always taken as high a place at the High School examinations as those of the other schools. Last May the South Cosmopolitan Grammar School graduated 75 out of 87 pupils, the second highest percentage of all the schools in San Francisco.

In every class, the pupils who study German or French invariably stand higher than those who only study English. The following extract from the report of Mr. Stevenson, Superintendent of Columbus, Ohio, shows that his experience has been similar:

“The results show that, instead of being a hindrance, the study of German, when continued for a reasonable length of time, is an advantage to the pupils and greatly increases their power to acquire a knowledge of the common branches. I should not advise Anglo-American parents, whose children can be kept in school but a few years, to have them take German; their time should be given to common English branches; but should they continue in school till the close of the Grammar School course, they will derive great advantage from the pursuit of German. No more time is given, for no more is needed, to complete the English course, in consequence of having taken the additional study of German. It is no mean accomplishment for a boy or girl to be able to speak, read or write both English and German with considerable fluency, ease and accuracy, which hundreds of our pupils who leave the schools at the close of the Grammar School course can do.”

There is no doubt that the study of a modern language increases a pupil's power of comprehending the grammar of his own language, and it could be easily shown that the pupils of the Cosmopolitan Schools, in most instances, have proved to be the better grammarians at the High Schools; composition and style in general does not seem to suffer from the study of French or German, and the translation from one into the other; and, finally, the study of Word Analysis is facilitated in no small degree by the study of modern languages.

There ought to be some one appointed to see that the course of instruction in German and French is properly carried out. That person ought to be a teacher of considerable experience in the teaching of languages, who would have to arrange the course of instruction, examine the classes from time to time, consult with teachers, make out uniform examinations of all grades, etc. Such a teacher might devote part of his time to teaching some of the higher classes, and give the rest of his time to the supervision of the Cosmopolitan classes, but without a head of some kind there will not be any uniform results.

The principal Cosmopolitan Grammar School suffers from one great disadvantage—viz, not having a Cosmopolitan Primary School within reasonable distance, so as to be able to draw from it. As it is, the Fourth Grades of said school, instead of being entirely supplemented by classes of children who

have received instruction in languages, are annually filled from a number of schools in which no instruction in German or French is given, and if they wish to commence either language in the Fourth Grade, it is in many cases impossible, and in all cases too hard for the teacher, who has to devote part of his time to give such pupils that elementary instruction which they ought to have received elsewhere.

As there is in this (South Cosmopolitan Grammar School) district not accommodation enough for primary classes, and as there is too much of it in the Post and Bush Street Primaries, would it not be a good plan to dispose of, say, the Post street property, which is becoming too valuable, and move that school nearer to its chief Grammar School? The distance from these two Primary Schools to the South Cosmopolitan Grammar School is fourteen and sixteen blocks, respectively, and this is too far, as it is hardly fair to make boys and girls, promoted from the Fifth to the Fourth Grade, walk that distance further, if they want to continue their studies in German or French.

At present the classification at the Boys' and Girls' High Schools is, at the commencement of each school year, made more difficult by the number of advanced scholars in German and French who are entering the Junior Classes, and who are unable to pursue their studies in these languages at the point where they left off. This inconvenience might be remedied by adding a number of High School classes to one of the Cosmopolitan Grammar Schools, and allowing the graduates of the First Grades to continue their French and German without interruption, taking up the High School studies at the same time. Thus, in course of time, a Cosmopolitan High School would grow up, of which all those would avail themselves whose aim is to perfect themselves in modern languages, and which would relieve the existing High Schools of too great an annual increase, and render their classification more simple and convenient.

The examination of teachers for German and French certificates is also a matter of considerable difficulty. The candidates are either natives of the respective countries, whose knowledge of English is limited, or they are natives of America who have acquired their knowledge of German or French here. The former will in most cases pass the better examination in German or French grammar, but will have difficulty in translating into English. They will have a good accent and faultless pronunciation; while the latter will frequently be deficient in that respect. The latter often show a very good knowledge of grammar, and get the required percentage in their examination, while on the other hand their pronunciation is faulty and their translation into French or German very defective. The certificate and its grade depend on the percentage obtained in examination; but, properly speaking, a bad pronunciation ought to debar a candidate from receiving any certificate. In a recent examination, for instance, several French certificates had to be

given to candidates whose pronunciation was decidedly bad, and who, on that account alone, ought not to be permitted to teach the language.

The teacher of a modern language ought to use that language during his recitations as much as possible, and, in consequence, he should be perfect master of it. An imperfect knowledge of the grammar, want of acquaintance with the literature of that language, faulty speaking and impure accent ought, above all things, not to be perceived in a teacher's instruction. The language of the teacher ought to be correct, his pronunciation distinct, his accentuation correct, so that the pupil's perception, to distinguish what is correct from what is false, may be awakened and advanced as quickly as possible.

The technical knowledge of grammar, however exact and comprehensive, does not give a person the power to handle a language with fluency and ease. This can only be obtained by practice and example, and must be the object of the school.

Much has been said and written for and against instruction in modern languages in the public schools. This is not the place nor the time to reproduce all the arguments on both sides. The commercial value of modern languages is undoubted. Only a few months ago the American Ambassador in one of the Central American republics, in a memorial to his government, expressed his regret that, in consequence of the superior linguistic faculties of the English and Germans, the latter controlled nearly all the commercial interests in Central America to the detriment of the United States.

Professor Huxley, who has been for many years member of the Board of School Directors in London, demands a sound knowledge of modern languages, not only from the merchant and the man of letters, but also from the mechanic and the technically educated man. [Huxley on "Technical Education," March number *Science Monthly*.]

General Grant, during his European travels, will probably, ere this, have found out the usefulness of the study of foreign languages at school. With only that foundation which is given to the pupils at our Cosmopolitan Schools, a few months would have sufficed to enable him to make himself understood in German and in French.



## REPORT OF EVENING SCHOOLS.

---

A. L. MANN, *Superintendent of Common Schools:*

SIR: In compliance with your request, I beg to submit the following report of the organization and progress of the San Francisco Public Evening Schools. Owing to the irregularity and meagreness of information upon Evening School matters in the early reports, I am unable to make the historical record as complete as I had hoped. I believe, however, that the information collected will be found interesting.

1856.—The Evening School was organized in either July or August (the reports conflict) of this year in the basement of the Cathedral, corner of California and Dupont streets. Over three hundred pupils were admitted, and five teachers employed by the Board; but more teachers being required, the Board met the exigency by accepting the voluntary services of some of their own body.

The report for 1858-59 states that "The Evening Schools were first organized by Messrs. John Hamill, John Swett, Ahira Holmes and James Denman, who volunteered their services until the Board of Education was convinced of the success of the schools.

1857-58.—The following remarks from the report of Mr. J. C. Pelton will show the intention in establishing the schools and whom they were intended to serve:

"In no city in the United States is there so great a necessity for an Evening School as in this. \* \* \* Here time is more valuable than elsewhere, and many young men and lads, from their own circumstances or those of their parents or guardians, are compelled to seek business or employment by day, who otherwise would be in school. Except for the advantages of an Evening School, such would be compelled to remain untaught or be their own instructors. The importance of sustaining the school cannot be well overrated. It should, I think, be a leading object with the Board of Education."

These arguments apply with equal force at the present day.



1858-59.—H. B. Janes, Superintendent, says in his report: "There are two Evening Schools"—"classes" is probably meant.

1859-60.—"There are three Evening Schools" on Sutter street near Kearny—viz., an English School with Mr. J. Stratton, Principal, and Mr. F. A. Elliott, Assistant, and a foreign Evening School, Mr. T. C. Leonard, Principal.

Enrollment, English classes.....	84
Average daily attendance.....	42
Enrollment, foreign class.....	143
Average daily attendance.....	25½

## SALARIES.

Mr. Stratton.....	\$75 00 per month
Mr. Elliott.....	62 50 per month
Mr. Leonard.....	62 50 per month

1860-61.—In the report for this year, I find the duty of the Committee on High and Evening Schools specified for the first time: "They shall have charge of their respective schools; shall visit and examine them, and make report thereof to the Board, observing the same rules, and performing the duties (so far as practicable) prescribed for the Committee on Classification."

The first rules for the government of Evening Schools were also published in the report for this year. The following are the most important:

Secs. 2 and 3.—The sessions of Evening School shall commence at seven and a quarter P. M. and close at nine and a half P. M., with an intermission of ten minutes at twenty minutes after eight.

Sec. 4.—Male children between the ages of eight and eighteen shall be entitled to the benefits of this school.

Sec. 5.—Young men over eighteen may attend this school on payment of two dollars each, per month, to the Principal.

Sec. 12.—Any pupil absent or late three evenings within a month shall forfeit his place in school, at the discretion of the teacher, subject to the decision of the Superintendent.

1861-62.—

## STATISTICS.

Pupils enrolled.....	150
Average attendance.....	40

## TEACHERS.

Principals.....	2
Assistants.....	2

In the report of Superintendent Tait, for this year, there is a retrospect of the Evening Schools, from 1856 up. After referring to the large numbers who first applied for admission, he goes on as follows:

"Various causes soon operated to diminish the attendance of the school. Prominent among these was the bad classification, and the objections of the adult pupils to the school discipline which was necessary to curb the turbulent conduct of many of the youths.

"So much indifference to the advantages of the school has at times been manifested by those for whose benefit the school was designed, that the Board has several times been on the point of discontinuing it."

From three hundred pupils, with five regular teachers and several volunteers in 1856, the attendance "dwindled to two classes in 1858, and remained of that size till 1861. It then increased to four."

The attendance in these four classes is given above.

"The Superintendent, in view of past fluctuation, recommends the opening of one school with one class, and the appointment of a Principal; other teachers to be employed when the actual attendance requires their services."

The teachers of the four classes of this year were paid:

Two Principals, each .....	\$566 18
Two Assistants, each .....	471 25

The regular terms began on the first Monday in September, and ended on the last Friday in April, with a vacation of two weeks at Christmas.

1862-63.—

Number of classes .....	4
Aggregate attendance .....	110

Studies: In Principal's class, book-keeping. Foreign classes, "Reading, spelling, and translating from French, Spanish and German. In the remaining class the pupils, who varied from eight to sixteen years, devoted themselves to the branches taught in the Primary Schools."

The Superintendent recommends the location of the classes in two conveniently-situated school houses, respectively north and south of Market street, and goes on to say:

"Until this change can be effected, it would be beneficial, perhaps, to allow the Principal time to inspect each class several times each month; to keep a monthly or general record of the classes, and to examine and classify all applicants."

1863-64.—In the report of this year the claim is made, for the first time, that "the Evening Schools have attained the dignity of a permanent institution, and it will not therefore be regarded as ill-timed to enquire if the advantages of evening instruction should be extended to females as freely and as fully as to the male sex."

In the Atlantic States no such distinction as here exists is recognized;

each sex has its separate schools, and all are well attended. For instance, in New York the attendance at female schools, in 1863, was 3,485.

1864-65.—

STATISTICS.

Number of pupils enrolled.....418  
No average attendance is given.

SALARIES.

One Principal.....\$75 00 per month  
Three Assistants, each.....62 50 per month

1865-66.—No general information.

SALARIES.

One Principal, per month.....\$75 00  
Three Assistants, per month.....62 50

1866-67.—

STATISTICS.

Lincoln Building—Three classes; 2 teachers; 122 in attendance.

Corner Post and Kearny—One class; 1 teacher; 50 pupils.

Corner Broadway and Montgomery—Three classes; 1 teacher; 36 pupils.

Broadway near Powell (colored)—Two classes; 1 teacher; 37 pupils.

Stevenson street, near Second—One class; 1 teacher; 38 pupils.

I presume “in attendance” means “enrolled,” and “classes” means “grades.”

1867-68.—“During seven months of the year there were five schools in operation, numbering 421 pupils, with an average attendance of 229.”

The classes were held in the following school houses, viz.: “Four in the Lincoln Grammar building, Mr. R. K. Mariner, Principal; one class for foreigners, in the Cosmopolitan building, on Post street, Mr. W. W. Theobalds, teacher; one class in the Broadway Grammar School, Mr. T. J. Leonard, teacher; one class for females in the Girls’ High School, corner of Bush and Stockton streets, Miss E. A. Pitts, teacher. A class for colored people was taught a few months by Mr. J. B. Sanderson, in the colored school building on Broadway street, but it was closed before the end of the year for want of a sufficient number of pupils.” Mr. Denman recommends the establishment of a commercial evening class.

1868-69.—The average number enrolled during the eight months of the year in which all the schools were in operation was 510—a gain of 128 over last year. The highest number belonging at any time was 758, requiring a corps of eighteen teachers. The average daily attendance in all

the classes was 336. This gives an average of  $18\frac{3}{4}$  pupils in attendance for each teacher.

"Twelve classes were taught in the Lincoln School building under the supervision of Mr. John Swett, Principal. One class was held in the Shotwell Street building, under the instruction of Mr. S. A. White; two classes in the Broadway colored school building, and one for girls was taught by Miss E. M. Tiebout in the Girls' High School building, corner of Bush and Stockton streets. Two classes for the colored people were held in the Washington School building for six months, until the colored school for day scholars was opened on the corner of Vallejo and Taylor streets.

"The commercial evening class has proved a great success. Instruction is not only given in the different forms of bookkeeping, but commercial arithmetic and all the legal forms of ordinary business are also thoroughly taught."

Mr. Denman, Superintendent, earnestly recommends the formation of a mechanical drawing class.

"The attempt to establish a day school for the Chinese proved a failure. The Board of Education, therefore, opened an Evening School for this class of our population, which, under the instruction of Mr. Wm. M. Dye, has been quite popular and successful. The whole number of pupils enrolled was 277; the average daily attendance was  $29\frac{1}{2}$ , thus showing the fluctuating character of the school. Most of the pupils only remain in school until they learn to speak and write a little English, when they leave to obtain lucrative positions as clerks and interpreters for their countrymen. The school is doing good, and, I trust, will continue to receive the liberal support of the Board of Education."

1869-70.—"During the year there were organized four Evening Schools for males, two for females and one for Chinese.

Number of teachers employed.....	22
20 males; 2 females.	
Average daily attendance.....	503
Gain over last year.....	147
Average number taught by each teacher.....	22
Average attendance of females for year.....	32

1870-71:

Average monthly enrollment.....	873
Average number belonging.....	690
Average attendance.....	596
Increase since last year.....	93
Number of teachers.....	21
Average number taught by each teacher.....	$23\frac{3}{4}$

"The Evening Schools are in good condition. They were somewhat broken

up by the burning of the Lincoln School building, in February, but many of the classes continued full to the end of the year.

“The classes in drawing have made good progress. They deserve to have every convenience extended to them.

“By the new regulations, the Evening Schools are made a permanent part of the school system.”—[Report of John Swett, Deputy Superintendent.]

Following are some of the most important of the regulations referred to:

Section 61—*Purpose*. The Evening Schools of this city are established to afford the means of an English education to boys and girls who are unable to attend the day schools and to adults who may wish to avail themselves of the privileges which they afford.

Section 63—*Terms*. They shall be continued for the same length of time during the year as the day schools, with the same vacations.

Section 64—*Studies*. The studies pursued in these schools shall be reading, spelling, writing, arithmetic, grammar, architectural drawing, mechanical drawing, book-keeping, algebra and geometry.

Section 66—*Sessions*. The sessions shall be held every evening in the week except Saturday and Sunday, and shall be two hours in length—the time of opening and closing to be determined by the Committee on Evening Schools, according to the season of the year.

Section 69—*Average number of a class*. No graded class shall be continued unless the average daily attendance equal or exceed twenty-five, and no ungraded class, unless the average attendance equal or exceed twenty.

Section 71—The general regulations of the Department shall apply to Evening Schools, except as herein provided.

The regulations at present in force differ very little from the foregoing. The main exception is the rule regulating salaries according to average attendance in classes. Under a late recommendation of the Evening School Committee, adopted by the Board, an average attendance of twenty-five constitutes a full class. The actual average attendance for each calendar month must be sworn to by the teacher; and when this falls below twenty-five, the salary of the teacher for the month is estimated by multiplying two dollars (\$2) by the number showing the average attendance.

1871-72:

Average monthly enrollment.....	1,116
Average number belonging.....	870
Average attendance.....	684
Increase.....	88
Number of teachers.....	35
Average number taught by each teacher.....	19½

Most of the classes were open for ten months. Mr. Swett recommends the opening of a class in Natural Science.

## 1872-73:

Average monthly enrollment.....	867
Average number belonging.....	668
Average attendance.....	541
Decrease.....	143
Number of teachers.....	26
Number of teachers August 1, 1872.....	14
Average number taught by each teacher.....	20.8

## 1873-74:

Average monthly enrollment.....	1,011
Average daily attendance.....	602.5
Increase.....	61.5
Average attendance to each teacher.....	21.5
Number of schools.....	5
Number of teachers.....	28
Number of classes.....	20

## 1874-75:

Total enrollment.....	2,213
Average number belonging.....	827.3
Average daily attendance.....	686.3
Increase.....	84
Number of classes.....	20
18 males; 2 females.	
Number of teachers.....	24
20 males; 4 females.	
Average attendance per teacher.....	28.6

## 1875-76:

Total enrollment for the year.....	2,916
Average number belonging.....	884
Average daily attendance.....	686
Percentage of attendance.....	77.6
Average daily attendance, per teacher.....	21
Number of classes.....	31
Number of teachers.....	33

Males 26; females 7.

## 1876-77:

Total enrollment for year.....	3,382
Average belonging.....	985
Average daily attendance.....	793
Increase.....	107
Percentage of attendance.....	80.5
Average attendance, per teacher.....	24



Number of classes.....	30
Number of teachers.....	34

Males 24; females 10.

Classes were this year organized in the following schools: The Lincoln, Greenwich Street, Washington, Potrero, South San Francisco, Post Street, Eighth Street, Hayes Valley, Valencia, Columbia, Geary Street, and Noe and Temple Street. The Principal, Mr. W. A. Robertson, finding it impossible to bestow as much attention as he considered necessary upon each school, asked for the appointment of a Vice Principal. Joseph O'Connor, who had for years acted in that capacity at the Lincoln School, was elected at a salary of \$65 per month.

1877-78:

Total enrollment for the year.....	3,599
Average number belonging.....	1,176
Average daily attendance.....	943
Increase.....	150
Percentage of attendance.....	81.1
Average attendance, per teacher.....	24.4
Number of classes.....	33
Number of teachers (males 25, females 12).....	37

#### ORDER, CLASSIFICATION AND ATTENDANCE.

During the first six years of their existence, the San Francisco Evening Schools made little or no progress, because of their poor order and poorer classification, and the irregular attendance of the pupils.

In the report for 1864, the Superintendent states that the Evening Schools have risen to the dignity of a permanent institution, but until 1868, under the Principalship of Mr. John Swett, their success was anything but satisfactory. To Mr. Swett belongs the credit of first establishing good working order throughout the city, and of getting the pupils fairly graded according to their scholarship. The general conduct of the persons at present attending night school is creditable alike to themselves and their teachers. It is simply excellent.

The classification is perhaps as good as possible under existing circumstances. At the Lincoln School, in which, last term, there were twenty-one classes, the pupils are graded as follows:

- 1st. Scholars unable to work beyond simple division—boys; ditto—men.
- 2d. Scholars able to perform ordinary questions in United States money, with simple exercises in fractions.
- 3d. Those able to work fractions and decimals.
- 4th. The same, with practical examples in interest and discount.
- 5th. Those working at higher arithmetic.

As the numbers in attendance increase, the grading is constantly improved by promotions, dividing classes, etc. The candidates for admission are questioned as to their grade when attending day school, what evening class they last attended, and, if new pupils, regarding their knowledge of arithmetic. We very seldom find an absolute beginner. We grade by arithmetic because, first, as a rule, the knowledge in other branches is on a par with that in arithmetic; and, second, because the scholars of the general classes invariably wish to make arithmetic the principal study. If, after all the above precautions, a pupil should be placed in the wrong class, the teacher is instructed to report the fact, so that, at the end of the school month, the scholar may be placed in the class which best suits him. Whenever it is possible, men and boys are placed in different rooms.

#### SPECIAL CLASSES—COMMERCIAL DEPARTMENT.

In Superintendent Denman's report for 1869, mention is made of the fact that the first commercial class for instruction in book-keeping, commercial arithmetic, etc., had been successfully organized in 1868, at the Lincoln Evening School, by Joseph O'Connor. When I took charge of that class it numbered *seven pupils*. There are at present (September, 1878) three large commercial classes at the Lincoln School, and one at the Mission School, besides portions of classes at the Washington, and Noe and Temple Schools. The total number of students in this department of the Evening Schools is, at present, about two hundred; and it must be remembered that when a pupil is absent five consecutive evenings his name is stricken from the roll, and he must give an excellent cause for his absence before being readmitted. When it is taken into consideration that there are two large Business Colleges in this city, the above figures will, I think, show as plainly as anything can the great progress and success of these classes. The greatest care is taken to make everything regarding actual business as clear as possible. I have not kept a list of those who have turned the knowledge of book-keeping acquired in evening school to good account; but I believe I am entirely within the limit when I say that, from time to time, I must have met at least two hundred of our pupils, who either keep their own books or the books of others, or are clerks whose labors have been lessened and salaries increased because of this knowledge.

I have nothing to recommend in this connection, except that successful book-keeping teachers should be their own successors year after year, as it takes time for even a good teacher to learn to instruct an evening class to the best advantage. The order in these classes is perfect, the attendance is regular, and the teachers understand their duty and perform it faithfully.

## DRAWING.

The first class in mechanical drawing was organized in 1869, on the recommendation of Superintendent Denman. This department of the Evening Schools has not flourished as it should. Poor teaching has had something to do with this slow progress. The good teachers did not remain long enough, and the poor ones remained too long. There have also been occasional annoyances regarding light and room accommodation. The classification, too, was imperfect. Now, however, every facility is afforded to the drawing pupils for thorough study and rapid advancement. The grades are:

First—Free-hand. Second—Mechanical, with Geometry. Third—Architectural.

The room for architectural drawing is furnished exactly like an architect's drawing room. Through the influence of Mr. Scheeline, Chairman of the Evening School Committee of the late Board, a number of very fine free-hand, mechanical, and architectural copies, plans and models were imported from Europe and mounted here for the use of the evening drawing classes.

There are also a number of valuable works on the Steam Engine, Hydraulics, Strength of Materials, etc. We are probably better supplied in this respect than any evening school in the United States. The light, which lately has been rather poor, is to be improved at once by an additional gas supply. In fact, the Evening School Committee, justly appreciating the great value to mechanics of thorough instruction in industrial drawing, seem determined to spare no pains in placing this department on a sound and lasting basis.

## FOREIGN CLASSES.

From their very infancy the evening schools have afforded special instruction to foreigners unable to speak English. Most of the pupils are German, and next in order are French, Spanish, Swedes and Norwegians. A class for Italians was organized last year, under the management of Mr. F. Seregini, formerly writing teacher in the Department. The attendance was for some time quite good.

As French and German are the only special modern language certificates issued to teachers, and as otherwise they must hold English certificates, it is very difficult to find properly qualified instructors for any except the French and German classes. I would recommend that these classes be organized every year by opening a class at the Lincoln School for Germans, under the instruction of some teacher holding both German and French special certificates; and a class for French, Spanish and Italian pupils at the Washington School (it being in the neighborhood of the Latin quarter), under the instruction of some teacher holding a French special certificate.

The order, attention and progress of the pupils attending these classes cannot be praised too highly.

#### MATHEMATICAL CLASS.

A knowledge of algebra and geometry is indispensable for the thorough acquirement of such trades as boiler-making, modeling, engine-building, etc.; and it is with the object of benefiting the persons engaged in these occupations that a class for instruction in algebra, geometry—including mensuration—and higher arithmetic, has been organized at the Lincoln Evening School. This class is at present in excellent condition.

#### FEMALE CLASSES.

I cannot understand why the attendance in these classes is so miserably small. Out of an average attendance of nine hundred and forty-three, for the term ending June 30, 1878, the attendance of females was something over one hundred. There are at present but three female evening classes in the Department—two at the Lincoln School and one at the Washington. There must certainly be almost as many illiterate women and girls in San Francisco as there are men and boys; why should the number of the latter attending school be eight times that of the former? I know that women must work later in the evening than men; but that state of affairs also exists in the Eastern cities, where the attendance in the female evening schools runs away into the thousands. I believe the mistake in San Francisco lay in not admitting females to evening schools until 1866, ten years after their organization. Women got into the habit of looking upon the evening classes as affording accommodation for men and boys only, and I presume there are hundreds of women in this city now who would gladly attend night school if they thought they could enter classes exclusively female. This paucity of attendance makes the instruction inferior by preventing thorough grading. I think the experiment of teaching plain needlework for an hour every alternate night, should be tried in some of these classes.

#### ATTENDANCE OF PUPILS.

The percentage of attendance for the year ending June, 1876, was 77.6; for 1877, it was 80.5; and for the year ending June, 1878, 81.5.

Taking into account the large number of adults attending school whose business and other engagements frequently necessitate their absence, the above figures make a good showing. Eighty scholars present throughout the year out of every one hundred enrolled is not by any means poor; but I believe the attendance, especially in boys' classes, is still far more irregular

than it should be. The teachers do all in their power to remedy this defect; but the parents and guardians, who could and should do most to abate the evil, really do next to nothing. Indeed, pupils who desire very sincerely to avoid tardiness and absence are often detained by parents and employers, for most frivolous reasons. The irregular attendant compares his lack of progress with the rapid advancement of those who come regularly and lose none of the instruction given in their classes, and the result is disgust with himself first, and with the school next, and then come, in regular order, tardiness, frequent absence, and, finally, total absence. Now, all this mischief, with the resulting evils, might be obviated, if the parents or guardians would visit the classes in which their children are enrolled, even once in the month. The teacher would only be too happy to show by his roll-book when the child was tardy or absent, and to tell whether his attention and deportment in school were satisfactory. Parents, as a rule, seem to consider this matter of school visiting unimportant; but if it prevents truancy—and truancy at night is much worse than in the daytime—it is likely to prevent “hoodlumism,” because the young hoodlum almost always begins his downward career (I never knew an exception) by playing truant. Parents are often unable to find time to visit day schools; but they have no such excuse regarding night schools.

I would recommend the monthly distribution, in the boys' classes, of report cards, by means of which the parents could be advised of the progress, deportment and attendance of their children.

#### CENTRALIZING THE SCHOOLS.

During the past year the classes scattered all through the city were concentrated in the following schools, viz.: The Lincoln, corner Fifth and Market streets; the Washington, corner of Mason and Washington streets; the Mission, Mission street, near Sixteenth; the Columbia, Twenty-sixth and Columbia; the Geary Street, Geary street, near Scott; and the Noe and Temple Street.

This plan of centralizing makes it easy to grade and classify the pupils to the best advantage, and renders careful supervision possible, so that much better work will be done and at less cost to the Department than under the old system.

#### GENERAL REMARKS AND RECOMMENDATIONS.

The principal requirements for a successful school are good order and regular attendance of pupils, with proper grading or classification. These the teachers must be able to bring about and maintain. The existence of these conditions will be good proof of the success of both teachers



and pupils, but not by any means proof sufficient. In order to have certain evidence of the excellence of the teacher and of the advancement of the pupils, it will be necessary to hold examinations of the scholars, and to find what proportion of those enrolled show *their* appreciation of the instruction received, by continuing members of the class.

The Principal should be allowed time to examine the pupils and report on the progress of each class once in each school term of eleven weeks. Through this plan, in connection with the personal observation of the members of the Evening School Committee, it would be easy to select the very best of the teachers of each year to take charge of the classes opened during the first month of the next year. New teachers might be appointed to vacancies occurring afterward; but, in my opinion, none except those having previous experience in night school should be appointed during organization.

A system of grading and a practical course of study, with lists of the books to be used, should be made out and adopted for night schools. The methods of classifying evening schools should not be traditional or arbitrary.

Teachers of the Commercial, Drawing, Mathematical and Foreign Classes should hold special certificates.

In these departments of the Evening School twenty should constitute a full class.

I cannot close this report without gratefully testifying to the kindly feeling and generosity of the Board to the Evening Schools. In a year when the finances of the Department have been unusually crippled, the Board has recognized the value and usefulness of these schools by opening them two months earlier than usual, and giving the committee authority to organize classes and employ teachers as fast as pupils presented themselves. Neither can I pass in silence the labors of the Evening School Committee, Messrs. Sullivan, Leggett and Mountain. They have in reality been Assistant Principals; and never before, within my knowledge, have *all* the members of the committee, with the Superintendent, visited the schools so often and taken such interest in their welfare.

Respectfully submitted,

JOSEPH O'CONNOR,

Principal of Evening Schools.



## REPORT OF THE PRINCIPAL OF THE UNGRADED SCHOOL.

---

To A. L. MANN, *Superintendent Common Schools:*

The Board of Education, after due consideration of the subject, recently concluded to establish a special school for the benefit of those pupils to whose wants the regular course of study seemed to be unsuited. The wisdom and propriety of this measure will hardly be questioned by any one who has been for any length of time an intelligent observer of the workings of our educational machinery. No public school curriculum, however nearly it may approximate to perfection, can by any possibility be adapted to the capacities and circumstances of all pupils. A uniform system of instruction is, of course, necessary in all large cities. The regulations of the School Department must specify certain branches of study to be pursued, which branches must be taken up in a prescribed order and mastered by the pupil before there can be any advancement to a higher grade. If there were no such uniformity in our mode of instruction, it would be utterly impossible to compare the work of one teacher or school with that of another, and our whole educational system would be involved in hopeless confusion.

But the moment a fixed programme of studies is adopted, and operations in the schoolroom commenced, it is found that a certain percentage of the pupils have not the intellectual quickness requisite for the accomplishment of the required task in anything like the assigned time. Such disparity in the intellectual powers of children is but natural. It would be as absurd to expect that all children, without exception, should come up to a given standard of mental force, as it would be to expect that all children should come up to a given standard of physical strength. And equally natural are the results that flow from this difference in the intellectual capacity of pupils. Those who are endowed with less than an average degree of mental activity do not acquire such a mastery of their studies as will enable them to run the gauntlet of the annual examination with success. As a necessary consequence of their failure, they drop back into a class of younger and

smaller pupils. They fail again and again, and finally become discouraged and indifferent, and lapse into a condition of chronic indolence, from which there is but little hope of rescuing them so long as the regular programme of studies is adhered to.

For the regular programme insists that all pupils, without exception, shall take all the prescribed studies in hand and push them forward *pari passu*. The regular programme forbids the pupil's advancing a single step unless he bears the burden of the entire course with him. The regular programme really requires that a common skiff shall carry as much freight as the Great Eastern, and, as a natural consequence, the craft of scantier proportions is swamped in the experiment, and is finally cast upon the strand, a hopeless wreck. The progress of all our schools is marked by educational wrecks of this character.

As at least a partial remedy for this condition of affairs, it was deemed advisable to open a special school, in which the course of study should be simplified and abbreviated in such a manner as to render it better adapted to the wants and capacities of backward pupils. All the ornamental superfluities with which the regular course of study is cumbered would be unceremoniously lopped off, and the labors of the school confined to a few essential branches. Reading, writing and arithmetic would monopolize nearly the entire time of the pupils, and these branches would thus receive double or treble the amount of attention paid to them in other schools. Under such an arrangement, it was confidently believed that many pupils who had accomplished little or nothing in their attempts to master the full course of study would succeed in making some appreciable and beneficial progress.

But this special school, if successfully managed, gives promise of usefulness in other respects. Many children of average or more than average intellect are, from the force of circumstances, extremely irregular and intermittent in their attendance upon school. The necessities of parents often compel them to take a child from school whenever that child can obtain employment for a number of weeks or months, and thus assist in the support of the family. When employment fails, the child resumes attendance upon school, to drop out again and again in the future. Of course, such spasms of schooling will not enable a pupil to pursue any elaborate programme of study, and some abbreviation of the regular programme becomes imperatively necessary. Again, our metropolitan city is constantly receiving accessions to her population from all parts of the country, and all parts of the world. Many of these new arrivals consist of families who come from localities that are entirely destitute of school advantages, and whose nearly grown children are lacking even in the rudiments of an education. These children have, perhaps, arrived at such an age that they can attend school but a year or two at the most, and it is evident that in their case some special instruction is

needed. It would be a manifest absurdity to consign them to an infant class, with the expectation that they will travel the long and tedious road that is there pursued in order to attain to practical results.

Nor does the fact that this school is to be composed of pupils in different stages of advancement militate in any degree against its usefulness or efficiency. In reality, a mixed school is a school organized, so to speak, on nature's plan; while the system that prevails in this city, of assorting our pupils and arranging them in eight different grades, which are separated from each other by a Chinese Wall of exclusiveness, is purely artificial and in some respects positively detrimental. Just as a little child in the family learns to imitate the words and actions of those who are older, so does the little beginner in a mixed school learn by listening to the exercises of the more advanced classes. He sees the older pupils step up to the geographical charts that hang upon the wall, and point out the different localities and mention their names, and these names gradually find lodgment in his own memory. He hears the reading, spelling and pronunciation of the more difficult words of the language, and these words finally become familiar to his ear. In a thousand ways he is benefited by this association, and if he displays an unusual aptitude for learning he can be advanced from class to class with the utmost ease. But under our present rigid system of grading; the pupil enjoys no such advantages. The beginners are placed in a class by themselves, and, of course, their instruction is entirely of a childish character. They know nothing whatever of the work of the higher grades, and when they are advanced to these grades the tasks assigned them are more difficult of performance by reason of their entire novelty. Moreover, there is now no opportunity for the rapid promotion of bright pupils. It may safely be said that the greatest educational want of San Francisco is the adoption of a system of mixed schools, under which system each class shall comprise pupils representing about three of our present grades. In a mixed school there is ample room for the exercise of the imitative faculty, which is especially strong in childhood, and which is the first faculty to be addressed in a correct process of primary instruction. It is true that the exercise of this faculty, and also the exercise of the memory, are denounced as injurious to the youthful mind. We are told that the reasoning powers are the only ones that should be cultivated. It is a cardinal feature of that tissue of absurdities known as the Pestalozzian system, that a genuine education consists solely in the unfolding of the mental germ enshrined in the child's soul; that all the knowledge a child may obtain is to be evolved entirely from his inner consciousness; that he is to receive no impressions and no ideas from the mind of another person; that nothing is ever to be told him, and nothing is ever to be repeated to him—that, in short, he is to be placed at the very foot of the ladder of progress, just about abreast of Darwin's ape, and is to be required to re-discover for himself

all the arts and sciences which the world has been so many ages in accumulating; and that he is to be left to grope in darkness till he has made such discovery. This insane theory is infecting and demoralizing our entire system of primary instruction, but it can hold but brief sway. The time must speedily arrive when it will be universally admitted that the imitative faculty should first be called into active exercise, and that the best possible field for such exercise is to be found in a mixed, or "ungraded" school.

As this special school has been in operation but a few weeks, it is too early as yet to speak of definite results. It is already apparent, however, that there is an abundance of material in the city, in the shape of pupils requiring an irregular course of instruction. A few instances will illustrate this fact. Among the pupils enrolled is a young man, seventeen years of age, who has just completed a season's work at harvesting and threshing in the Sacramento valley, and who now desires to attend school a few months, in order that he may make some improvement in writing and arithmetic. He has been out of school for seven years. Two boys, of the ages of thirteen and fifteen, who have recently arrived with their parents from France, desire to attend school where they can obtain an unusual amount of drill in reading and spelling English. Exactly similar is the case of a young Spaniard who has been but a month in the country.

Backward pupils have also appeared in large numbers. Among these are several of the age of ten years or more, who have never succeeded in getting out of the Eighth Grade; some half a dozen who have been in the Seventh Grade four years without promotion; an equal number who have been in the Sixth Grade an equal length of time, while ten or twelve have arrived at the age of fourteen years and are still in the Fifth Grade. The total enrollment is now about seventy. Included in this list, however, are many bright, quick-minded pupils, whose parents desire them to attend school where they can obtain the rudiments of an English education as speedily as possible, without wasting any time on ornamental branches. All are addressing themselves to their tasks with unwonted assiduity, and all are possessed with the idea that they are making unusual progress.

H. C. KINNE.

## ANNUAL EXAMINATIONS — MAY, 1878.

---

### CIRCULAR TO PRINCIPALS AND ASSISTANT TEACHERS.

Principals of Grammar Schools are requested to fill out the proper blanks, in *triplicate*, with the names of their first grade pupils, in alphabetical and vowel order, recording the result of the examination in drawing, and also their average year's standing, in the appropriate columns. These blanks must be sent to the Deputy Superintendent, at the office of the Board, *without fail*, on Thursday, May 23d. Where a class is composed of both boys and girls, two separate lists must be made out. The names of those scholars who have been promoted, honorarily, on their year's standing, will be designated by a letter H, in red ink, in the column headed "per cent. in examination." Their year's standing must be given with that of the other members of the class.

In all grades, the year's standing will also be taken into consideration, and those only who attain an average standing of 70 per cent. will receive certificates of promotion.

In all cases where it may seem desirable, Principals are authorized to arrange their classes for the coming year, so as to avoid at least a portion of the confusion and delay incident to the re-opening.

The following First Grade teachers will report to the Principal of the Girls' High School on Friday, May 24th, at 9 A. M.: Mrs. Reynolds, Mrs. Mayborn and Mrs. Burke.

The following will report at the Boys' High School: Mr. Reed, Mr. Sturges and Mr. Edwards.

Principals and assistants will observe the following rules:

1. Teachers will require the name and age of each pupil to be written at the head of each paper; also, the name of the school, the grade of the class, the name of the teacher of each class and the name of the examiner in charge of the class during the examination.

2. Teachers will give the pupils no assistance during the examination, but they may give any explanation necessary to a fair understanding of the

questions. The papers of all pupils detected in copying or communicating during the examination should be rejected.

3. All books relating to the subject under examination should be collected by the examiner before commencing the exercises.

4. Principals will preserve the papers of each class for the use of the Committee on Classification.

5. All teachers are required to give their undivided attention to the class while passing any examination.

No crediting of papers or other work should be performed during such exercises.

6. No general recess should be given to the classes while passing an examination.

7. In order to secure uniformity in crediting, Principals will arrange the papers to be credited so that the same teacher will credit all the papers of the same study in each grade. As far as possible, the papers will be delivered to teachers in the next higher grades for correction.

8. The examination questions will be delivered, on the order of the Principal, by 8 o'clock A. M., on the day of the examination.

9. Blank certificates of promotion will be furnished to each Principal, and must be delivered to pupils before the close of the term.

10. Principals of Grammar Schools will send to the High Schools, on the morning of Friday, May 31st, for the certificates of graduation of pupils of the First Grade, which they will deliver to the proper parties in their respective schools.

11. Principals are authorized to hold such closing exercises, under the rules of the Board, as they may desire.

12. The credits in each study must be copied into the book of "Record of Examination."

As soon as all the credits of the pupils, including those of the First Grade, shall be entered in this book, the Principals are requested to send it to the Board of Education, for the inspection of the Committee on Classification.

13. Principals are instructed to arrange the classes of each grade, except the Eighth Grade, as evenly as possible, so that there shall be no high and no low classes of the same grade.

The pupils of the First Grade classes will be examined for graduating from the Grammar Schools and for admission to the High Schools, on Friday, Monday, Tuesday and Wednesday, May 24th, 27th, 28th and 29th.

The girls will meet on Friday, May 24th, at 9 A. M., at the Girls' High School. The boys will meet at the same time at the Boys' High School.

The teachers of the High Schools will examine and credit all the papers of the candidates for admission to these schools.



Deputy Superintendent Stone will have the general supervision of the examination and of the crediting of the papers.

It is desirable to have the papers of this examination carefully credited, and the work completed as soon as possible.

The percentage of credits for graduation and for promotion is fixed at 70 per cent.

The credits for Penmanship will be given on the exercise in Composition.

Order of Examination.—First Grade—Friday, May 24th, 9 A. M., Arithmetic; 1 P. M., History of United States. Monday, May 27th, 9 A. M., Grammar; 1 P. M., Geography. Tuesday, May 28th, 9 A. M., Composition; 1 P. M., Spelling; 2 P. M., Mental Arithmetic. Wednesday, May 29th, 9 A. M., Word Analysis.

Second, Third, Fourth, Fifth and Sixth Grades—Monday, May 20th, 9 A. M., Language. Thursday, May 23d, 9 A. M., Geography; 1 P. M., Mental Arithmetic. Monday, May 27th, 9 A. M., Composition; 1 P. M., Spelling. Wednesday, May 29th, 9 A. M., Arithmetic.

The First, Third and Fifth Grades will be examined in French and German on Wednesday, May 22d, at 9 A. M.

A. L. MANN,  
Superintendent of Common Schools.

SCALE OF CREDITS.

STUDIES.	FIRST GRADE.	THIRD GRADE.	FIFTH GRADE.
Arithmetic, written.....	80	60	60
Arithmetic, mental.....	20	15	15
Grammar.....	60	50	50
Geography.....	40	30	30
Spelling.....	40	30	30
Composition.....	25	20	20
Writing.....	15	15	15
History.....	40	.....	.....
Reading.....	30	30	30
Music.....	.....	25	25
Word Analysis.....	25	.....	.....
Drawing.....	25	25	25
Totals.....	400	300	300

French or German adds 50 to the scale of credits.

The percentage of credits for graduation and for promotion is fixed at 70 per cent.

Principals will examine Third and Fifth Grades in Reading.

The credits in Drawing will be divided as follows:

Work in the drawing books, 12 credits; elaborate specimen, 8 credits; design, executed in one lesson, 5 credits.

Examination in Music in accordance with special circular.

The Deputy Superintendent will prepare questions in Arithmetic and Grammar for the Second, Fourth and Sixth Grades, which may be used by Principals, where preferred.

In all grades twenty-five per cent. of the class will be promoted honorarily, without examination, and *all* the other pupils in the class must be examined.

The year's record will be taken as of equal value with the credits at the final examination, and pupils promoted upon the average.

---

## ANNUAL EXAMINATION OF THE PUBLIC SCHOOLS.

SAN FRANCISCO, MAY, 1878.

---

### ARITHMETIC.

---

#### FIRST GRADE.

Ten Questions, Eight Credits Each.

NOTE.—Where the process is correct and the answer wrong, allow half the credits for the example.

1. (a) Define and illustrate ratio, discount, a concrete number, a prime factor. (4 credits.)

(b) Why do you commence at the right to multiply and the left to divide? (4 credits.)

2. (a) How many square yards in a square rod? (1 credit.)

How many linear feet in a mile in length? (1 credit.)

(b) How many acres in a circular field whose radius is  $84\frac{1}{2}$  rods? (6 credits.)

3. I wish to remit \$1,127.75 to Liverpool; at the rate of  $47\frac{1}{4}$  pence to the dollar, what will be the face of a draft for the amount?

4. (a)  $\frac{1\frac{3}{7}}{\frac{3}{7}} + \frac{4\frac{1}{7}}{12\frac{1}{2}} = ?$

(b) Add  $\frac{3}{5}$  and  $\frac{4}{7}$ , and give the analysis.

(c) Multiply  $\frac{3\frac{1}{2}}{5\frac{3}{4}}$  by  $\frac{6\frac{1}{4}}{2\frac{1}{9}}$ .

(d) Divide  $\frac{3}{5}$  by  $\frac{4}{7}$ , and give the analysis.

5. A trader buys four lots of goods, amounting respectively to \$721, \$535.50, \$114.60 and \$1,146.25. On the first lot he gets a discount of  $1\frac{1}{2}$  per cent. for cash, on the second 2 per cent., on the third  $2\frac{1}{4}$  per cent. and on the last only 1 per cent. How much cash will pay all the bills?

6. (a) What will it cost to fence a rectangular field  $182\frac{1}{2}$  rods long and 94 rods wide, at \$1.14 per rod? (4 credits.)

(b) What is the length of the diagonal of the field? (2 credits.)

(c) What is the land worth at \$11.25 per acre? (2 credits.)

7. On March 19, 1874, M borrowed of N one thousand five hundred dollars at 9 per cent. per annum, for which he gave his note. He made payments as follows;

Aug. 19, 1875, \$150.

Oct. 1, 1876, \$462.

Jan. 23, 1877, \$350.50.

July 1, 1877, \$300.

What amount will remain due on Dec. 20, 1878? (6 credits.)

Write out the note, and put the indorsements in the proper place. (2 credits.)

8. I sold two lots at \$325 each; for one I received 20 per cent. less than cost, and for the other 20 per cent. more than cost. How much did I gain or lose, and what per cent.?

9. If 2 men can build  $12\frac{3}{4}$  rods of wall 10 feet high in  $6\frac{1}{2}$  days, how long will it take 18 men to build  $247\frac{2}{3}$  rods 8 feet high? Solve by proportion.

10. (a) What will be the expense of excavating a cellar 36 feet long  $18\frac{1}{2}$  feet wide and 12 feet deep, at 55 cents a cubic yard? (4 credits.)

(b) How much will it cost to plank the walls at 18 cents, and the floor at 27 cents, per square yard? (4 credits.)

## SECOND GRADE.

Ten Questions, Eight Credits Each.

NOTE.—Where the process is correct and the answer wrong, allow half the credits for the example.

1. (a) Find the L. C. M. of 72, 84, 100, 91, 26, 78, 39. (2 credits.)  
 (b) Find the G. C. D. of 28 and 98, 72 and 411. (2 credits.)  
 (c) Define interest, a compound number, a prime number, a simple number. (4 credits.)
2. A man owning  $\frac{5}{15}$  of a steamboat died, leaving his interest to his wife and two children in equal portions. In two years the steamboat lost 20 per cent. of its value. One of the children then sold half his portion for \$895.25; what was the value of the whole boat at the same rate?
3. (a) Reduce  $\frac{1}{4}$  to a decimal of six places.  
 (b) Find the product and the quotient of seventy-two hundred thousandths and fifteen hundredths.
4. (a) Add  $\frac{4}{15}$ ,  $\frac{2}{11}$ ,  $\frac{7}{8}$ ,  $\frac{5}{9}$ ,  $\frac{9}{10}$ ,  $\frac{2}{30}$ , and  $\frac{1}{2}$ .  
 (b)  $51\frac{2}{3} \div 7\frac{1}{3} = ?$
5. On hand April 1st, \$720.65.  
 Received April 2d, \$48, \$75.50, \$1.80, \$500.  
 Paid out, April 2d, \$25, \$42.25, \$39.50, \$200.10.  
 Received April 3d, \$1,112.40, \$160.65, \$442.10.  
 Paid out April 3d, \$921.70, \$522.15, \$1.25, \$1.80.  
 Received April 4th, \$721.15, \$444.50, \$72.75, \$1.50.  
 Paid out April 4th, \$100, \$120, \$416.95.  
 Find balance of cash on evening of April 4th.
6. (a) 51 is 17 per cent. of what?  
 (b) What is 13 per cent. of 426?  
 (c)  $\frac{3}{8}$  is 8 per cent. of what?  
 (d) 28 is 7 per cent. of  $\frac{1}{4}$  per cent. of what number?
7. (a)  $2\frac{1}{3}$  is what per cent. of  $7\frac{1}{3}$ ?  
 (b) Find the cost of excavating a cellar 50 feet long,  $28\frac{1}{2}$  feet wide and 10 feet high, at 67 cents per cubic yard?
8. (a) Find the interest of \$912 at 8 per cent. per annum, for 5 months, 16 days.  
 (b) If I spend  $\frac{1}{2}$  of my money and  $\frac{1}{3}$  of the remainder, and am robbed of  $\frac{1}{4}$  of what I then have left, and have \$2.70 remaining; what had I at first?
9. (a) 1. How many rods in  $\frac{1}{16}$  of a mile?  
 2. How many ounces in  $13\frac{3}{4}$  lbs. of gold?  
 3. How many feet in  $14\frac{1}{4}$  rods?  
 4. Reduce  $\frac{1}{18}$  of a square rod to feet.  
 (b) If goods are bought for \$425, freighted to Deadwood at a cost of \$125.50, stored for a month at an expense of \$15, for what must they be sold to gain a profit of 32 per cent.?
10. An island, containing, in 1850, 5,290 inhabitants, lost 5 per cent. of its population annually for four years. Required the number of inhabitants in 1854.

## THIRD GRADE.

Ten Questions, Six Credits Each.

1. A buys  $46\frac{1}{2}$  doz. tubs, at \$11.50 per doz.;  $24\frac{1}{2}$  doz. buckets, at \$10.50 per doz.; 4 cans coal oil, at \$5.25; 13 lamps, at \$1.72; 15 cases preserved fruit, at \$3.90. Make out the bill in due form, and find the amount.

2. (a)  $5,296 + 784 + 2,146.34 + 7.36 - 11.007 - 298.05 = ?$

(b)  $\frac{5}{11} + \frac{9}{22} + \frac{5}{6} + \frac{1}{2} - \frac{2}{3} - \frac{4}{5} = ?$

3. (a) Reduce to the lowest common denominator:  $\frac{3}{4}, \frac{11}{12}, \frac{13}{18}, \frac{5}{2}, \frac{11}{21}, \frac{2}{7}$ .

(b) Reduce to their lowest terms:  $\frac{85}{178}, \frac{91}{256}, \frac{51}{880}$ .

4. (a) How many cubic feet in a cord of wood?

(b) How many ounces in  $4\frac{2}{3}$  pounds of gold?

(c) How many degrees in one-sixth of a circle?

(d) How many square yards in one square rod?

(e) How many quarts in  $12\frac{1}{2}$  bushels?

(f) Reduce 4 pounds, 11 shillings, 10 pence, 3 farthings to farthings, and prove by reduction ascending.

5. How many cubic yards in a cellar 24 feet long,  $14\frac{1}{2}$  feet wide and 10 feet high?

6.  $.0073 \times 1.036 \times 2.7 = ?$  Divide the product by 2.003.

7. (a) Find the time, in months and days, from June 16, 1872, to May 24, 1873.

(b) From Jan. 29, 1875, to Oct. 14th of the same year.

(c) From Oct. 24, 1876, to Feb. 12, 1878.

8. If I borrowed seven hundred and forty dollars on Jan. 1st at  $8\frac{1}{2}$  per cent. interest per year, how much did I owe on the fifth day of November?

9. Cash on hand on the morning of April 24th, \$421.75.

Received that day, \$40, \$29.45, \$100, \$1.75, \$562.75.

Paid out, \$14.50, \$11.75, \$211.75.

April 25th—Received, \$201.50, \$57, \$64.25, \$150, \$486.40.

Paid out, \$200, \$450.50, \$42.90.

Find the amount of cash on hand on the evening of each day.

10. A man inherits an estate of \$12,000. He spends  $\frac{2}{3}$  of it the first year,  $\frac{1}{3}$  of the remainder the second year, and the third year  $\frac{5}{8}$  of what was left; how much money did he have remaining?

## FOURTH GRADE.

Ten Questions, Six Credits Each.

NOTE.—Allow half the credits where the process is right and the answer wrong.

1. (a)  $(5,296 \times 3,841 - 299 - 1,328 + 62,460 - 8,290) \times 725 \div 25 = ?$   
 (b) Find the cost of 724 lbs. sugar @ 12 cts., 816 lbs. salt @  $2\frac{1}{2}$  cts., 52 lbs. coffee @  $23\frac{1}{2}$  cts., 84 doz. eggs @ 26 cts., 114 lbs. pork at  $11\frac{1}{4}$  cts. and 55 sacks potatoes @ \$1.25.
2. Subtract 2,529 from the sum of 3,472, 448, 1,254 and 56; divide the remainder by 113, and multiply the quotient by 205; what is the result?
3. (a)  $7\frac{8}{9} = ?$      $72\frac{4}{5} = ?$      $304\frac{11}{12} = ?$   
 (b)  $\frac{811}{12} = ?$      $\frac{1000}{3} = ?$      $\frac{918}{27} = ?$
4. (a)  $\frac{7}{8} + \frac{3}{11} = ?$      $\frac{5}{9} - \frac{1}{27} = ?$      $3\frac{2}{3} + 11\frac{4}{7} = ?$   
 (b)  $49\frac{1}{2} \times 14 = ?$      $5\frac{5}{6} \times 18 = ?$      $21\frac{9}{7} \times 49 = ?$
5. (a)  $2.146 + .000721 + .33333 - .0999 - 1.00072 - .007021 = ?$   
 (b) If thirteen pairs of shoes cost \$39, what will 86 pairs cost?
6. (a)  $(\frac{7}{12} \text{ of } 144) + (\frac{5}{6} \text{ of } 90) + (\frac{10}{7} \text{ of } 91) \times (\frac{3}{17} \text{ of } 51) + (\frac{8}{9} \text{ of } 99) + (\frac{2}{3} \text{ of } 54) = ?$   
 (b) Define an abstract number, a compound number, a factor of a number.
7. Add  $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{7}{8}, \frac{5}{9}, \frac{11}{12}$ .
8. If a horse consume  $\frac{1}{3}$  of a bale of hay in a week, how many bales will he eat in 5 months of 30 days each?  
 (a)  $4.027 \times 36.15 \times .007 = ?$   
 (b)  $741.075 \div 3.6 = ?$
10. (a) Find the interest of \$250 at one per cent. a month, for 5 months and 20 days.  
 (b) Compute the amount of \$720 at 8 per cent. a year, for 3 years, 6 months.

## FIFTH GRADE.

Ten Questions, Six Credits Each.

1.  $4,862 + 9,706 - 189 + 21,624 + 736 - 889 - 724 - 276 = ?$
2. Multiply 27,852 by 57, and divide the product by 38.
3. (a) What name do you give to the answer in addition? In subtraction? In multiplication? In division? (4 credits.)  
 (b) What is an improper fraction? (1 credit.)  
 (c) How do you reduce an improper fraction to a whole or mixed number? (1 credit.)
4. Reduce to improper fractions:  $8\frac{9}{11}, 21\frac{1}{2}, 5\frac{7}{8}, 121\frac{1}{2}, 40\frac{1}{2}, 16\frac{2}{3}$ .



5. Bought—

24 lbs. sugar at 14 cts.

117 lbs. potatoes, at 2 cts.

17 lbs tea, at 65 cts.

316 lbs. flour, at 3 cts.

11 cans fruit, at 23 cts.

5 cans matches, at \$1.75.

Find the amount of the bill.

6. (a)  $(\frac{5}{12} \text{ of } 132) + (\frac{1}{3} \text{ of } 45) + (\frac{6}{7} \text{ of } 49) = ?$

(b)  $(\frac{2}{3} \text{ of } 81) - (\frac{1}{2} \text{ of } 72) = ?$

7. (a)  $\frac{11}{12} \times 7 = ?$      $\frac{4}{5} \times 13 = ?$      $\frac{2}{3} \times 18 = ?$

(b)  $4862.50 \div 53 = ?$

8. If I can buy five pounds of copper nails for 85 cents., how much must I pay for 19 lbs.?

9. Cash received on Monday, \$44.20, \$6, \$11.73, \$52.75, \$1.89.

Paid out, \$1.44, \$20.50, \$5, \$7.20.

How much on hand at night ?

10. If a man start on a journey of 253 miles and travel 17 miles a day for 10 days, how far will he be from his destination at the close of the tenth day.

## SIXTH GRADE.

Ten Questions, Six Credits Each.

NOTE.—Where the process is right and the answer wrong, allow half the credits for the example.

1. Add five thousand twenty-nine, six thousand two hundred fifty-six, one thousand eight hundred seventy-five, three thousand four hundred and four; from the sum subtract 8,208, and multiply the remainder by 7.

2. Divide 7,207 by 6, and prove your work.

3. If 5 pounds of bacon cost 25 cents, how much will 7 pounds cost ?

4. How many lemons at 5 cents apiece must be given for 8 oranges at 10 cents apiece ?

5. If I receive \$42.50, \$1.25, \$4, \$521, \$9.50, \$1.85, \$20, \$4.21, and pay out \$7.25, \$1.50, \$1.75, \$20.90 and \$40, how much shall I have left ?

6. (a)  $672 \times 45 = ?$

(b)  $898 \times 76 = ?$

7. If I have \$50, and spend \$24 for a horse, \$7 for a saddle, \$2.50 for a bridle and \$3 for a pistol, how much shall I have left ?

8.  $(\frac{1}{2} \text{ of } 24) + (\frac{1}{3} \text{ of } 36) + (\frac{1}{5} \text{ of } 60) + (\frac{1}{7} \text{ of } 84) + (\frac{1}{9} \text{ of } 81) = ?$

9. If you have 100 oranges, and give 4 oranges apiece to twelve boys. how many will you have left ?

10.  $(6 \times 72) + (7 \times 51) + (4 \times 75) + (3 \times 56) = ?$

## MENTAL ARITHMETIC.

### FIRST GRADE.

Twenty Questions, One Credit Each.

[Read each question distinctly; give the pupils half a minute to solve the question, and then require them to write the answers in columns, in regular order.]

1.  $55 + 9 + 11 - 8 - 10 + 23 = ?$
2. Subtract  $\frac{2}{3}$  from  $\frac{7}{8}$ .
3. Divide  $6\frac{1}{8}$  by 7.
4. How many ounces in  $\frac{5}{8}$  of a lb. of lead?
5. How many ounces in  $1\frac{3}{4}$  lbs. of silver?
6.  $\frac{7}{16}$  multiplied by 5.
7. 39 is  $\frac{3}{10}$  of what number?
8. 51 is  $\frac{3}{2}$  of what number?
9. Interest of \$700 for two years and a half at 6 per cent. a year.
10. What is  $66\frac{2}{3}$  per cent of 42?
11. What is  $12\frac{1}{2}$  per cent of 96?
12. 21 is 7 per cent. of what?
13.  $11\frac{1}{5}$  is 25 per cent. of what?
14.  $\frac{5}{8} + \frac{2}{3} = ?$
15. .32 divided by .4 = ?
16. How many cubic feet in  $2\frac{1}{3}$  cubic yards?
17. How many pints in  $7\frac{7}{8}$  gallons?
18. Find amount of \$400 a year at 5 per cent. a year for  $2\frac{1}{2}$  years.
19. If 25 per cent. is lost by selling a horse for 72 dollars, how much did he cost?
20. Reduce  $7\frac{2}{3}$  to an equivalent fraction having 9 for a denominator.

### SECOND GRADE.

Twenty Questions, One Credit Each.

[Read each question twice; give the pupils one minute to solve the question, and then require them to write the answers in columns, in regular order.]

1.  $7 + 11 - 9 + 16 - 8 - 7 = ?$
2. Add  $\frac{1}{2}$  and  $\frac{3}{4}$ .

3. Add  $\frac{1}{5}$  and  $\frac{1}{3}$ .
4. Subtract  $\frac{7}{12}$  from  $\frac{3}{4}$ .
5.  $6\frac{1}{12} =$  how many twelfths?
6.  $\frac{3}{4}$  of 48 is  $\frac{6}{7}$  of what?
7. How many ounces in  $\frac{2}{3}$  of a lb. of silver?
8. How many yards in 8 rods?
9. 15 is 5 per cent. of what number?
10. 7 is  $33\frac{1}{3}$  per cent. of what number?
11. 41 is 50 per cent. of what number?
12. What is  $16\frac{2}{3}$  per cent. of 72?
13. What is 9 per cent. of \$500?
14. If 8 men do a piece of work in 9 days, in how many days will 12 men do it?
15. In  $10\frac{1}{2}$  miles how many rods?
16.  $44 + 9 + 2 + 7 + 11 - 19 = ?$
17. Find the cost of  $5\frac{1}{4}$  lbs. of powder at 40 cts. per pound.
18. At  $12\frac{1}{2}$  cts. a pound, what will 12 pounds of sugar cost?
19.  $\frac{1}{5}$  of 55 +  $\frac{7}{8}$  of 80 = what?
20.  $.2 + .07$  divided by 3 = ?

## THIRD GRADE.

Fifteen Questions, One Credit Each.

[Read each question distinctly, and give one minute for solution.]

1.  $16 + 8 + 11 + 5 - 9 - 7 - 10 = ?$
2.  $\frac{2}{3} + \frac{7}{12}$ .
3.  $\frac{1}{2} - \frac{1}{3}$ .
4. How many inches in  $3\frac{1}{3}$  feet?
5. How many ounces in  $\frac{7}{8}$  of a pound of sugar?
6. How many feet in 4 rods?
7. If 8 cows cost \$96, how much will 11 cost?
8. 27 is  $\frac{9}{11}$  of what number?
9. What is  $\frac{1}{12}$  of 84?
10.  $6\frac{1}{2}$  times  $\frac{8}{11} = ?$
11. Interest of \$200 for 3 years at 8 per cent.
12.  $(\frac{1}{3} \text{ of } 35) + (\frac{1}{11} \text{ of } 22)$ .
13. A man bought 40 oranges at the rate of 2 for 5 cents. How much did they cost?
14. Cost of 30 pounds of sugar at  $10\frac{1}{2}$  cents a pound.
15.  $\frac{3}{11}$  of 99 is how many times 11?

## FOURTH GRADE.

Ten Questions, One and a Half Credits Each.

[The teacher will read each question twice, give one minute for mental solution, and then require the pupils to write the answers in regular order in columns.]

1. In  $7\frac{5}{8}$  how many eighths?
2. In  $\frac{5.5}{9}$  how many whole ones?
3.  $\frac{3}{8}$  of 24 multiplied by 5 = ?
4.  $\frac{4}{5}$  of 20 added to  $\frac{1}{2}$  of 18 = ?
5. If 7 cows cost \$140, how much will 10 cost?
6. Reduce  $\frac{5.5}{40}$  to its lowest terms.
7. Add  $\frac{1}{3}$  and  $\frac{1}{2}$ .
8. Subtract  $\frac{1}{2}$  from  $\frac{1}{12}$ .
9.  $8 + 11 + 7 + 3 + 9 - 4 - 8 = ?$
10. How many ounces in  $\frac{7}{8}$  of a pound of salt?

## FIFTH GRADE.

Fifteen Questions, One Credit Each.

[Read distinctly, and allow one minute for solution. Require the answers to be written in a column.]

1.  $36 + 12 - 9 = ?$
2.  $\frac{7}{8} \div \frac{11}{8} + \frac{5}{8} = ?$
3.  $3\frac{3}{8} =$  how many fifths?
4.  $\frac{5}{6}$  of 54 = ?
5.  $\frac{2}{3}$  of 11 added to  $\frac{1}{2}$  of 22.
6. How many dimes in seven dollars and a half?
7. How many yards of ribbon at 9 cents a yard can you buy for one dollar and eight cents?
8. Subtract  $\frac{5}{7}$  from  $\frac{21}{7}$ .
9.  $\frac{4.4}{8} = ?$
10.  $\frac{3}{11}$  of 77 = ?
11.  $\frac{7}{8}$  of 56 = ?
12.  $40 - \frac{1}{3}$  of 30 = ?
13. 7 times  $12 - 14 = ?$
14. 8 times  $8 + 6 \div 10 = ?$
15. Cost of 11 cows at \$11 apiece.

## SIXTH GRADE.

Ten Questions, One and a Half Credits Each.

[The teacher will read the question, allow reasonable time for solution, and require pupils to write the answers in columns.]

1.  $42 \div 5 + 2 \div 7 = ?$
2.  $5 \times 10 - 2 \div 6 = ?$
3. If I go out with \$72, and buy 6 tables at \$10 each, how much shall I have left?
4.  $12 \times 10 - 20 = ?$
5.  $\frac{1}{5}$  of  $95 + \frac{1}{7}$  of  $42 + \frac{1}{9}$  of  $81 = ?$
6. At 8 cents a yard, what will 11 yards of ribbon cost?
7.  $72 \div 8 + 11 + 16 \div 4 = ?$
8.  $\frac{1}{10}$  of  $70 + \frac{1}{3}$  of  $18 = ?$
9. How many halves in 20 apples?
10. 35 is how much more than 21?

## GRAMMAR.

## FIRST GRADE.

Twelve Questions, Five Credits Each.

1. Give five uses of the *noun*, with a brief sentence illustrating each.
2. State five different ways of forming the plural of nouns. Illustrate.
3. Write a complex sentence containing an adverbial clause, the verb *to be* in the pluperfect potential, and a predicate nominative modified by an adjective phrase.
4. The teacher said *that that* word *that* I parsed as an *adjective* was in fact an *adverb*. Parse the italicised words.
5. (a) "And where is *he*, that *tower* of strength?"  
 (b) "*Read* on her urn, 'A broken *heart*!'"  
 (c) "It is a *consideration* of *much* weight."  
 (d) "*Tremble*, then, thou silent *tomb*!"  
 (e) "*Heat* me those *irons* hot!"  
 Parse the italicised words.
6. Give five rules for the use of capital letters.
7. Give the possessive plural of the following: Man, woman, judge, I, he, scholar, child, thief, hero, who.
8. Define a verb, a sentence, a noun in apposition, a complex sentence, a phrase.

9. Correct the errors in the following sentences. Give reasons for correction.

1. Neither of us four are absent.
2. We have, in this State, only a wet and dry season.
3. I hope I will succeed.
4. Were Clay or Calhoun ever Presidents of the United States?
5. Really, between you and I, I think quite different.

10. Write—

1. A sentence containing *but* as a preposition.
2. A complex sentence containing the future perfect tense, indicative mood, active voice of *lie* (to recline).
3. A sentence containing the pluperfect tense, potential mood, passive voice, of *learn*.
4. A sentence containing a proper adjective and a descriptive adjective.
5. An interrogative sentence containing the superlative degree of *near*.

11. (a) When the horses had satisfied their hunger we resumed our journey.

Change to a simple sentence. ( $1\frac{1}{2}$  credits.)

(b) As he had now served out his term of imprisonment, he was discharged.

Change to a simple sentence. ( $1\frac{1}{2}$  credits.)

(c) He had gone. The money was missing. He, only, knew where it was. He was very poor. He was unscrupulous. We both felt positive that he had taken the money.

Condense into one complex sentence. (2 credits.)

12. Parse the italicised words in the following:

- (a) To labor is *to pray*.
- (b) On *seeing* me he ran away.
- (c) Let her *return* as soon as possible.
- (d) *Waving* his sword he dashed into the *raging* fight.
- (e) On account of his *having committed* that crime he was condemned.
- (f) War *having been declared*, both sides hurried up their preparations.
- (g) The *purling* brook ran *singing* by.
- (h) If I *were* rich I should be happy.



## SECOND GRADE.

Ten Questions, Five Credits Each.

1. (a) Define sentence, subject, predicate, phrase, an adverb.

- (b) "Still the farmer sat in his easy chair,

*While*, close to his heaving breast,

The moistened *brow* and the cheek so fair

Of his sweet grandchild *were pressed*.

His head, *bent* down, on her soft hair *lay*—

Fast asleep were they both on that summer day."

Rule your paper suitably, and write in the proper column each word in this stanza.

2. (a) Parse briefly the five italicised words in the above. (2½ credits.)

- (b) What is a transitive verb? (1 cr.) Write a sentence containing three transitive verbs. (1½ cr.)

3. (a) How do most nouns form their plurals? (1 credit.)

- (b) Give the plurals of wharf, life, grief, arch, monarch, calf, roof, chimney. (2 credits.)

- (c) Write the possessive plural of child, monarch, life, calf, arch, bridge, brother, citizen. (2 credits.)

4. In what five ways can a noun be used in a sentence? Illustrate.

5. Write five sentences exemplifying the different uses of pronouns.

6. (a) Write two sentences containing predicate adjectives. (2 credits.)

- (b) Write a sentence containing the superlative degree of *far*. (1 credit.)

- (c) What is a predicate adjective? (2 credits.)

7. Write sentences containing the past tense of lie (to recline), lay, flee, rise, come, eat, cut, set, sit, go.

8. Write five sentences containing the present perfect tense, indicative mood, of go, write, rise, fly, see.

9. (a) What is an adverbial phrase? Illustrate. (1 credit.)

- (b) What is an adjective phrase? Illustrate. (1 credit.)

- (c) Construct a sentence containing a feminine proper noun modified by an adjective and an adjective phrase, a verb in the future tense modified by an adverb and an adverbial phrase and a noun in the objective case. (3 credits.)

10. Give examples of two common errors in the use of—

- (a) Pronouns.

- (b) The past tense of verbs.

- (c) The present perfect tense of verbs.

- (d) Adjectives.

- (e) Correct—"Every man told their own tale," and give the reason for the correction.

## THIRD GRADE.

Ten Questions, Five Credits Each.

1. Distribute properly into columns all the words in this stanza:
 

" I hear thee speak of the better land;  
 Thou call'st its children a happy band;  
 Mother! Oh, where is that radiant shore ?  
 Shall we not seek it and weep no more?  
 Is it where the flower of the orange blows,  
 And the fireflies dance through the myrtle boughs?"  
 " Not there, not there, my child!"
2. (a) Give three uses of capital letters. (3 credits.)  
 (b) Write adjectives formed from the following proper nouns:
  1. Norway. 2. Paris. 3. Scotland. 4. Germany. (2 credits.)
3. Write—
  1. A sentence containing a predicate noun.
  2. One containing a limiting adjective.
  3. One containing the superlative of *bad*.
  4. One introducing the word *woman* in the possessive plural.
  5. One containing the possessive plural of *dwarf*.
4. Write the plurals of ox, valley, chimney, potato, tooth, wharf, life, deer, sheep, thief.
5. (a) Name four kinds of sentences. (2 credits.)  
 (b) What is a sentence? ( $\frac{1}{2}$  credit.)  
 (c) Define a verb, an adverb, a conjunction, a proper noun, a predicate. ( $2\frac{1}{2}$  credits.)
6. Write one or more sentences, stating your birthplace and your present residence (giving city, street and number), your school and grade, the studies you pursue, and tell which of them you like best.
7. Give the present and past tenses of ten verbs which form the past irregularly.
8. Form adjectives from the following nouns: 1. Hope. 2. Health.
3. Noise. 4. Fancy. 5. Excess.
9. Form adjectives from the following verbs: 1. Teach. 2. Eat.
3. Love. 4. Reason. 5. Drink.
10. Correct—
  1. They ain't none there.
  2. Him and me have went there often.
  3. That book what I give you yesterday.
  4. We think different.
  5. Them apples is oun.

## FOURTH GRADE.

Ten Questions, Five Credits Each.

1. Rule your paper properly, and put in the proper column each kind of word in the sentences below:

1. A furious tempest raged fearfully for a day and a night.
2. My dear friend Arthur left here yesterday.
3. You and I are both of an age.

2. Define a noun, a verb, an adjective, a declarative sentence, an interrogative sentence. Give examples.

3. Form one sentence, stating your name, your birthplace, your present residence (giving street and number), the name of your school, the name of your teacher, your grade and the studies you are following.

4. (a) Give a suffix which added to an *adjective* will form a noun, with two examples. (2 credits.)

(b) Give two examples of a noun formed from a *verb*. (2 credits.)

(c) What suffix added to a *noun* will form another noun? Example. (1 credit.)

5. State the distinction between limiting adjectives, describing adjectives and proper adjectives, giving an example of each.

6. (a) How are adverbs formed from adjectives? (2 credits.)

(b) What adverbs can you form from sweet, terrible, busy, able, dear, extreme? (3 credits.)

7. (a) Give five uses of capitals.

(b) Give the plurals of lily, chief, wharf, toy, potato.

8. (a) Write the proper contraction, or short form, for: 1. You are. 2. I have. 3. Never. 4. He will. 5. Over. 6. They are. (3 credits.)

(b) Give the object form of I, he, she, they. (2 credits.)

9. (a) Give the past tense of go, see, write, know, stop, find. (3 credits.)

(b) What do you mean by the subject of a sentence? the predicate? (2 credits.)

10. Write five sentences containing the possessive plurals of friend, woman, man, girl, lady. Underline the subject, and draw a line *over* the predicate of each sentence.

## FIFTH GRADE.

Ten Questions, Five Credits Each.

1. Rule the paper properly, and put in the right columns all the words in the following sentences:

1. The hills around San Francisco are now fresh and green.
2. Oh, how loudly the sea roars to-day!
3. This little pony belongs to my brother.
2. (a) Write a sentence about your schoolhouse, using five adjectives. (2½ credits.)  
(b) Form adjectives from the following nouns: fancy, doubt, mercy, fear, hope. (2½ credits.)
3. What is a noun? a common noun? a proper noun? a verb? an adjective?  
4. (a) Mention five uses of capital letters. (2½ credits.)  
(b) Form adjectives from the following verbs: tax, blame, teach, eat, drink. (2½ credits.)
5. The *merchant sent for his clerk, who immediately came.*  
What part of speech is each of the italicised words in the above.
6. (a) What is an adverb?  
(b) With what are adverbs generally used?  
Write three sentences, each one consisting of only *four* words — an article, a noun, a verb and an adverb.
7. Correct—
  1. Them horses is my uncles'.
  2. You wasn't there, neither.
  3. I'm a goin a fishin.
  4. Him and me have went to school together.
  5. I seen him when he done it.
8. Write four separate statements about a ship, and then unite them into a single sentence.
9. Form nouns from the following words and define each noun formed:  
1. Sweet. 2. Buy. 3. Soft. 4. Prince. 5. Work.
10. Write one or more sentences, telling where you were born, where you now reside (giving street and number), your grade in school, the studies you are pursuing, and which of them you like best.

---

### SIXTH GRADE.

Ten Questions, Five Credits Each.

1. (a) Write five separate sentences about the clock.  
(b) Draw a line under every noun in these sentences.
2. Rule your paper properly, and put in the proper column each word in the sentences below:
  1. The shaggy old grizzly bear sat quietly on his haunches.
  2. I attended a grand picnic on the first day of May.

3. (a) What are adverbs?  
(b) Supply adverbs modifying the verbs in the following sentences:  
1. The waves roared \_\_\_\_\_.  
2. Richard will arrive \_\_\_\_\_.  
3. The lark sings \_\_\_\_\_.  
4. Write five sentences, each containing only *four* words—an adjective, a noun, a verb and an adverb.  
5. Write five sentences, each containing only *three* words—an article, a noun and a verb.  
6. (a) What is a sentence? (2 credits.)  
(b) What is a declarative sentence? (3 credits.)  
7. (a) Write five declarative sentences of only *two* words each.  
(b) Change these sentences into *interrogative* sentences.  
8. Correct—  
1. Them is hisn.  
2. Him and me done that sum.  
3. I have went to the city twice.  
4. It is her.  
5. Between you and I.  
9. (a) Write five pronouns and five prepositions. ( $2\frac{1}{2}$  credits.)  
(b) What name do we give to connecting words? emotion words? quality words? ( $1\frac{1}{2}$  credits.)  
(c) Give two emotion words. (1 credit.)  
10. (a) Write one sentence telling where you were born, where you now live, what school you attend and what you study.  
(b) Tell two uses of capital letters.

---

## GEOGRAPHY.

---

### FIRST GRADE.

Forty Credits.

1. What is physical geography? political geography? What is the axis of a sphere? What places on the earth have no latitude? What is a glacier? a watershed? a delta? the Tropic of Cancer? (4 credits.)  
2. Locate Archangel, Cape St. Lucas, Adrianople, Cairo, Melbourne, Mt. Baker, Bombay, Yokohama. (4 credits.)

3. (a) What are the four principal divisions of the German Empire? (2 credits.)  
 (b) What countries border on the Black Sea? (2 credits.)
4. (a) Name two principal causes of ocean currents. (2 credits.)  
 (b) What current largely influences the climates of California and Oregon? (1 credit.)  
 (c) What causes the heavy fogs which prevail off the coast of Newfoundland? (1 credit.)
5. Locate the following rivers: 1. The Danube. 2. The Amoor. 3. The Rhone. 4. The Salinas. 5. The Lena. 6. The Indus. 7. The Parana. 8. The Sabine. (4 credits.)
6. Name three countries in South America which border on the Pacific Ocean. Give their capitals. (3 credits.)
7. Give a brief account of the commerce of San Francisco, naming the principal foreign and domestic ports with which our trade is carried on, and the main articles of import from each. (3 credits.)
8. Draw an outline map of California, locating six important cities or towns, four rivers, three lakes, three prominent mountain peaks, two mountain ranges and two capes. (14 credits—map 4 credits, each location one-half credit.)

### THIRD GRADE.

Ten Questions, Three Credits Each.

NOTE.—Take off one-fourth of one credit for each misspelled word.

1. What is an isthmus? a promontory? an oasis? a meridian? a table land? a peninsula?
2. What parallel of latitude is the northern boundary of California? (2 credits.)  
 Name two other States having their boundary on the same line. (1 credit.)
3. (a) What sea south of Europe?  
 (b) What peninsula in the southwestern part of Asia?  
 (c) What cape forms the northwestern point of Washington Territory?
4. (a) What river separates Mexico from the United States? ( $\frac{1}{2}$  credit.)  
 (b) Name two eastern branches of the Mississippi. (1 credit.)  
 (c) What noted mountain peak in Vermont? ( $\frac{1}{2}$  credit.)  
 (d) What large river flows through Pennsylvania?  
 (e) What large river flows through Massachusetts? ( $\frac{1}{2}$  credit.)



5. (a) Give the length and average breadth of California. ( $\frac{1}{2}$  credit.)  
 (b) Name the two great valleys, and two other important valleys of this State. (1 credit.)  
 (c) Name and locate three lakes and three lofty mountain peaks of the State. ( $1\frac{1}{2}$  credit.)
6. Name and locate six important cities of the United States.
7. Name and locate six important cities in Europe, Asia and South America.
8. (a) Bound the State of California. (2 credits.)  
 (b) Name and locate the capital and the principal commercial city of Oregon. (1 credit.)
9. Where is Alaska? Cape Finisterre? The Rhine? Ceylon? Honolulu? Seattle?
10. (a) Of what States are the following cities the capitals: 1. Raleigh.  
 2. Austin. 3. Jefferson City. 4. Nashville. (1 credit.)  
 (b) Where is Mt. Popocatepetl? Mt. Rainier? (1 credit.)  
 (c) What are the two principal towns in the southern part of this State? (1 credit.)

## FIFTH GRADE.

Ten Questions, Three Credits Each.

NOTE.—Take off one-fourth of a credit for each misspelled word.

1. Give the proper terms for—
  1. The tract of country drained by a river and its branches.
  2. A fertile spot in a desert.
  3. The chief city of a country.
  4. The lines running from north to south on a map.
  5. A sea containing many islands.
  6. A shallow channel or bay.
2. Tell where the following are situated:
  1. Cape Blanco.
  2. The Sandwich Islands.
  3. The River Nile.
  4. Baffin Bay.
  5. The Alleghany Mountains.
  6. Lake Winnipeg.
3. (a) Where do the Esquimaux live? ( $\frac{1}{2}$  credit.)  
 (b) What three European nations first came to America? ( $1\frac{1}{2}$  credits.)  
 (c) To what government do Cuba and Porto Rico belong? ( $\frac{1}{2}$  credit.)  
 (d) Where did Columbus first land? ( $\frac{1}{2}$  credit.)

4. Name—
  1. The strait leading into Baffin Bay.
  2. The sea north of South America.
  3. The largest lake in North America.
  4. The large island southeast of Africa.
  5. The largest city in the world.
  6. The strait leading into the Mediterranean Sea.
5. (a) What is the area of California? (1 credit.)  
(b) What parallel of latitude is its northern boundary? (1 credit.)  
(c) What are the two principal mountain ranges of California?  
(1 credit.)
6. Name and locate three prominent mountain peaks and three lakes in this State.
7. (a) What are the two great valleys of California?  
(b) Name one bay on the coast north and one south of San Francisco.  
(c) Mention two localities in this State noted for grandeur and native beauty.
8. Bound the State of California.
9. (a) Name the capital and the chief commercial city of Oregon.  
(1 credit.)  
(b) What two important articles do we get from Washington Territory? (1 credit.)  
(c) When was California ceded by Mexico to the United States, and when was it admitted into the Union? (1 credit.)
10. (a) What was San Francisco first called? (1 credit.)  
(b) What are the two most important mineral products of the State?  
(1 credit.)  
(c) Which is the great silver-producing State? (1 credit.)

## SPELLING.

### FIRST GRADE.

#### Forty Credits.

(a) Forty Words, One-half Credit Each.

- |                     |                    |                     |
|---------------------|--------------------|---------------------|
| 1. Indefinite.      | 15. Repair.        | 28. Precipitate.    |
| 2. Cupola.          | 16. Prepare.       | 29. Collision.      |
| 3. Comparative.     | 17. Alleviate.     | 30. Reinforcements. |
| 4. Positive.        | 18. Indispensable. | 31. Engineers.      |
| 5. Reference.       | 19. Especially.    | 32. Sympathy.       |
| 6. Nauseous.        | 20. Administer.    | 33. Reprieve.       |
| 7. Promontory.      | 21. Intercede.     | 34. Innocent.       |
| 8. Balance.         | 22. Menace.        | 35. Obstinate.      |
| 9. Indicative.      | 23. Satirical.     | 36. Recognition.    |
| 10. Multiplicand.   | 24. Symptom.       | 37. Guardian.       |
| 11. Physiology.     | 25. Irritation.    | 38. Illuminate.     |
| 12. Superintendent. | 26. Supersede.     | 39. Appetite.       |
| 13. Epicure.        | 27. Corridor.      | 40. Nutritious.     |
| 14. Piteous.        |                    |                     |

(b) Twenty Words, One-half Credit Each.

- |                |                     |                  |
|----------------|---------------------|------------------|
| 1. Behring.    | 8. New Hampshire.   | 15. Seattle.     |
| 2. Oregon.     | 9. Louisiana.       | 16. Himalaya.    |
| 3. Alaska.     | 10. San Bernardino. | 17. Singapore.   |
| 4. Valparaiso. | 11. San Rafael.     | 18. Edinburgh.   |
| 5. Tennessee.  | 12. Raleigh.        | 19. Marseilles.  |
| 6. Michigan.   | 13. Alleghany.      | 20. Mississippi. |
| 7. Minnesota.  | 14. Cincinnati.     |                  |

(c) Give five important rules for spelling. (10 credits.)

### THIRD GRADE.

#### Thirty Words, One Credit Each.

- |              |                  |                   |
|--------------|------------------|-------------------|
| 1. Retrieve. | 11. Scythes.     | 21. Despairing.   |
| 2. Conceit.  | 12. Sphere.      | 22. Flattery.     |
| 3. Wriggle.  | 13. Mortise.     | 23. Granaries.    |
| 4. Deceive.  | 14. Telegraph.   | 24. Autumn.       |
| 5. Salable.  | 15. Cypher.      | 25. Impossible.   |
| 6. Seizure.  | 16. Assistance.  | 26. Ornamant.     |
| 7. Column.   | 17. Society.     | 27. Subsistence.  |
| 8. Solemn.   | 18. Aversion.    | 28. Abundance.    |
| 9. Abyss.    | 19. Artificial.  | 29. Propensities. |
| 10. Siege.   | 20. Principally. | 30. Necessary.    |

## FIFTH GRADE.

Thirty Words, One Credit Each.

- |                |                |                  |
|----------------|----------------|------------------|
| 1. Attorney.   | 11. Purchase.  | 21. Despair.     |
| 2. Medicine.   | 12. Seizure.   | 22. Received.    |
| 3. Machinery.  | 13. Melon.     | 23. Mischief.    |
| 4. Editor.     | 14. Furnace.   | 24. Handsome.    |
| 5. Balance.    | 15. Pittance.  | 25. Surprised.   |
| 6. Lieutenant. | 16. Premises.  | 26. Accident.    |
| 7. Albatross.  | 17. Service.   | 27. Opposite.    |
| 8. Asparagus.  | 18. Succeeded. | 28. Countenance. |
| 9. Strychnine. | 19. Prisoner.  | 29. Vengeance.   |
| 10. Gymnast.   | 20. Relieved.  | 30. Different.   |

## HISTORY OF THE UNITED STATES.

## FIRST GRADE.

Ten Questions, Four Credits Each.

1. For what is each of the following dates noted? 1812, 1541, 1497, 1773, 1620, 1803, 1755, 1607.
2. (a) Name four prominent Indian chiefs; state where each of them lived, and whether he was friendly or hostile to the white settlers. (2 credits.)  
 (b) State what three European nations settled the coast of North America, and tell what part of the coast was colonized by each. (1½ credits.)  
 (c) Which of the thirteen colonies was last settled? (½ credit.)
3. (a) Which State was divided during the Civil War? (1 credit.)  
 (b) Which two of the present New England States were not among the thirteen colonies? (1 credit.)  
 (c) Which State was acquired by annexation? (1 credit.)  
 (d) Which was the first State admitted into the Union? (1 credit.)
4. (a) Name four prominent American Generals of the Revolutionary War. (2 credits.)  
 (b) Name four noted English commanders of the same war. (2 credits.)

5. (a) Give a brief account of one battle of the last war with England. (2 credits.)

(b) Name four States formed from the Louisiana purchase. (2 credits.)

6. Name four great battles of the Rebellion, with the date and the result of each, giving the names of the Union and the Confederate commanders.

7. What possessions did the French hold in America at the beginning of the French and Indian War; what causes produced that war, and to what results did it lead?

8. (a) Name the inventors of the following:

1. The cotton gin.
2. The electric telegraph.
3. The sewing machine.
4. The steamboat. (2 credits.)

(c) Name two prominent American poets, and two noted writers of history. (2 credits.)

9. (a) Who captured Vicksburg in the Civil War, and to what result did this event lead? (2 credits.)

(b) Mention some noted event in the lives of —

1. Clay.
2. Franklin.
3. Andrew Johnson.
4. Calhoun. (2 credits.)

10. (a) What did the United States gain by the Treaty of Guadalupe Hidalgo? (2 credits.)

(b) Explain what was meant by the Missouri Compromise and the Emancipation Proclamation, giving the approximate date of each. (2 credits.)

---

## COMPOSITION.

---

### FIRST GRADE.

Twenty-five Credits.

NOTE TO EXAMINERS.—Penmanship, 15 Credits, must be marked on this paper.

(a) Write an essay, of not less than twenty lines, on the following subject: "My Progress at School During the Past Year."

Give the names of the studies you have pursued, tell which of them you

like best, and state what you have learned to do in drawing. Give also some interesting facts that you have learned in History, Physics and Physiology. (15 credits.)

(b) Write a business letter of not less than five lines, properly addressed dated and signed. (8 credits.)

(c) Transpose the following into good prose:

“ How wonderful is Death,  
Death and his brother Sleep!  
One, pale as yonder waning moon,  
With lips of lurid blue;  
The other, rosy as the morn  
When throned on ocean's wave,  
It blushes o'er the world;  
Yet both so passing wonderful!” (5 credits.)

---

### THIRD GRADE.

Twenty Credits.

(a) Write a brief essay, of fifteen lines or more, upon any one of the following subjects:

1. Goat Island.
2. A policeman's duties.
3. The habits of a good boy.
4. A fire engine.
5. The Cliff House.
6. What shall I do in vacation? (10 credits.)

(b) Write a letter of not less than five lines, properly dated, addressed and signed. (6 credits.)

(c) Transpose into good prose the following verse:

“ Said the cunning spider to the fly:  
‘ Dear friend, what shall I do,  
To prove the warm affection  
I've always felt for you?  
I have within my pantry,  
Good store of all that's nice;  
I'm sure you're very welcome;  
Will you please to take a slice?’ ” (4 credits.)



## FIFTH GRADE.

Twenty Credits.

(a) Write a composition of not less than fifteen lines about any one of the following subjects:

1. A horse.
2. An elephant.
3. The circus.
4. A ship.
5. Hoodlums.
6. Vacation. (10 credits.)

(b) Write a letter of five lines or more to your teacher, properly addressed, dated and signed. (6 credits.)

(c) Transpose the following into good prose:

“ Once or twice though you should fail,

Try again.

If you would at last prevail,

Try again.

If we strive, 'tis no disgrace,

Though we do not win the race;

What we should do in the case—

Try, try again!” (4 credits.)

---

EXAMINATION IN MUSIC.

WEDNESDAY, APRIL 24, 1878.

---

## SECOND GRADE.

1. Write major scales of G, A and E.
2. Give the signature and position of the key notes of the keys of F, E flat and A flat.
3. Give the order of intervals of the major scale.

4. Give the accents of four kinds of measure.

First Exercise.....	3 credits.
Second Exercise .....	3 credits.
Third Exercise .....	2 credits.
Fourth Exercise.....	2 credits.
Reading.....	15 credits.
	<hr/>
	25

### THIRD GRADE.

1. Write scale in keys of F and D.
2. Give the signature and position of the key notes of the keys of G and B flat.
3. Name the letters used as the pitch names of tones.
4. Give the names of the beats in four kinds of measure.
5. Place the following notes upon staff in key of F: do, sol, fa, la, mi, re, si, sol, mi.

Two credits for Each Exercise.....	10
Reading.....	15
	<hr/>
	25

### FOURTH GRADE.

1. Write scale in key of F, and give pitch names of each note.
2. Make a sharp, a flat and a natural, and tell the use of each.
3. Give the signature of the keys of G and F.
4. Tell how music should be sung when marked *pp*, *p*, *m*, *f*, *ff*.
5. Place notes upon staff in key of G, in position required by the following scale names: 1, 5, 3, 2, 4, 6, 8, 3, 5, 7, 8.

Credit as in Third Grade.

### FIFTH GRADE.

1. Make five notes in common use.
2. Make five rests in common use.
3. Write scale in key of C, and place under the notes the scale names, pitch names and syllables.
4. Tell where the half steps of the scale are found.

5. Give the syllable names of the notes on the first, second and third lines of the staff in the key of C.

Credit as in Third Grade.

---

### SIXTH GRADE.

1. Make the whole, half, quarter and eighth notes.
2. Make the whole, half, quarter and eighth rests.
3. Make the staff with the G cleff.
4. Make the scale on the staff.
5. Write the syllables under the notes of the scale.

Four credits each—20.

Principals will direct these questions to be written on the blackboard and the pupils to write the answers on their slates or on paper. Let teachers exchange classes as far as practicable. The special teachers will examine the pupils individually in reading music.

---

## WORD ANALYSIS.

---

### FIRST GRADE.

Twenty-five Credits.

1. (a) From what three languages are the most of the words in the English language derived? (3 credits.)

(b) Which one may be considered as the basis of the language? (1 credit.)

(c) To which of these languages do the short words in common use belong? (1 credit.)

2. Define a root-word, a simple word, a prefix, a suffix, a derivative word.

3. Define the following prefixes, tell whether they are Latin or Greek and exemplify their use: anti, ante, amphi, trans, contra, arch, hydro, post, sub, hexa.

Model: ab, (L.) = from. Ex. abduct.

eu, (G.) = well. Ex. euphony.

4. (a) Give and define two words ending in *logy*. (2 credits.)  
 (b) Combine *ion*, meaning *the act of*, with retain, permit, produce, oppose, attend, receive. (3 credits.)
5. (a) Give, with their exceptions, two important rules used in forming derivative words. (2 credits.)  
 (b) Define the suffixes *ous*, *sive*, *fy*, *ize*, illustrating the use of each. (2 credits.)  
 (c) Define the word *metropolis*, and give its derivation. (1 credit.)

---

## GERMAN.

---

### FIRST GRADE.

Ten Questions, Four Credits Each.

1. Give the principal parts of *reißen*, *zwingen*, *nehmen*, *fechten*, *halten*, *fügen*, *stehlen*, *verdrießen*.
2. Decline singular and plural—*Dieser wilde Reiter; keine goldene Uhr; grünes Blatt*.
3. What cases are governed by the following prepositions: *ohne*, *wider*, *unter*, *außer*, *ungeachtet*, *aus* *vor*, *für*?
4. Change into sentence with passive construction: *Die Mörder sammelten Heere. Ihr habt den Frieden verletzt.*  
 Change into sentence with active construction—  
*Tarquinius wurde von seinen Genossen zum Könige ausgerufen.*  
*Romulus ist von den Göttern abgeholt worden.*
5. Synopsis of *mögen* in the second person singular, indicative and subjunctive moods.
6. Compare *hoch*, *viel*, *groß*, *sparsam*.
7. Give first person singular, present tense, indicative mood and past participle of *abschreiben*, *verachten*, *zerstören*, *übersetzen*.
8. Dictate, on page 350, *Die Urgeschichte*, till *Cyrus*.
9. Translate the same into English.
10. Translate: After a few years all friends of Pompey had been conquered by Cæsar. Come home with your army, for the Romans have attacked our city. You may not cross the river Ebro. Sulla was elected dictator for life-time by his party.

## THIRD GRADE.

Ten Questions, Four Credits Each.

1. Place the proper article before—Nachbar, Zahl, Welt, Buch, Wurm, Mädchen, Haus, Doctor.
  2. Decline: Der kleine Affe. Deine große Gabel. Schwarzes Kleid.
  3. Translate: He will be. They have been. We were. I shall become. They have had. She was. He becomes. We shall have had.
  4. Form the nominative plural of the following nouns: Garten, Bäcker, Kutscher, Tag, Stiefel, Dach, Pferd, Schiff.
  5. Translate: Of us, to you, her, to them.
  6. Compare: gut, nah, hoch, viel.
  7. Give the feminine of the following nouns: Mann, Löwe, Graf, Nefse.
  8. Translate: Who will write the longest letter? Is your house higher than my castle? I have sold the wood to the carpenter. Will the knives not become blunt?
  9. Dictate: Granert, page 163, lesson 160; from Ein Knabe—fletterte.
  10. Translate into English.
- 

## FIFTH GRADE.

Eight Questions, Five Credits Each.

1. Conjugate: ich hatte, ich werde, ich war, ich bin gewesen, ich habe gehabt.
2. Put the proper article before: Brod, Hund, Fenster, Stuhl, Auge, Fuß, Haus, Schule, Tisch.
3. Compare: fett, still, klein, hell, gut.
4. What part of speech is every word in the following sentence: Das große Mädchen schreibt Buchstaben?
5. Translate: He has had cloth. Have you ice enough? Am I not as rich as you? Is the cook as big as the brewer? The soldier is not here.
- 6-7. Dictate: Page 33, lesson 36; from Ein englischer Lord—fenten. (10 credits.)
8. Translate the same into English. (5 credits.)

## FRENCH.

## FIRST GRADE.

1. Translate into English, Dumas' Napoleon, page 27, from line 14 to line 23.
2. Translate into French, same book, page 44, from line 16 to line 1st, next page.
3. Where do you place the conjunctive pronouns in French sentences, and translate into French: She has answered me. I do not give it him. Eat them. Do you know me?
4. What is the difference between the relative pronouns *qui* and *que*, and translate: The door which is open. The hat which I have bought.
5. Write the second person singular of the simple tenses of the verbs *dormir*, *venir*, *recevoir*; and the first person plural of *vouloir* and *s'en aller* of compound tenses.
6. Write the primitive tenses of the verbs *parler*, *savoir*, *écrire*, *faire*, *pouvoir*.
7. Dictate Dumas' Napoleon, page 36, from line 9 to line 14.
8. Write a French letter to a friend about your examination.

## THIRD GRADE.

1. Form the plural of *le hibou*, *l'eau*, *le ciel*, *le général*; and the feminine of *bref*, *doux*, *faux*, *public* and *honnête*.
2. Write the 1st person singular of all the simple tenses, of *avoir* and *être*, and the 2d person plural same tenses of the verbs *chanter*, *fournir* and *répondre*.
3. Translate into French: The father loves his son. The mother loves her son and her daughter. My male and my female friend.
4. In what case are numeral co-ordinals used in French instead of ordinals? Illustrate.
5. Compare the adjectives *grand*, *sage*, *heureux*, *bon* and *mauvais*.
6. When does the article contrast with the prepositions *à* and *de*? Illustrate.
7. Translate Second French Reader, page 28, from *En parlant ainsi* to next page, *entre elles*.
8. Translate same book, page 57, *Qu'est-ce qu'un insecte* to *bien d'autres*.



## FIFTH GRADE.

1. Translate into English: Personne n'est plus malheureux que ce jeune homme. Bon jour, Madame, aurez-vous fini vos manteaux aujourd'hui? Oui, Monsieur, merci. Chez qui avait-elle acheté sa montre? J'avais écrit une lettre à ce Monsieur, il était bien triste. Prêtez une paire de souliers à cet enfant.

2. Translate into French: How old is this merchant? I think of you every day. Who is that old gentleman who is seated by the side of my father? Your mother is right, but your cousin is wrong. Your gloves were too small.

3. Write the 2d person and the 3d person plural of the present, past and future of the verbs *avoir* and *être*.

4. Dictate: Aurez-vous donc cueilli ces fleurs pour notre voisin? Depuis trois semaines, j'ai reçu quatre lettres de Vienne. Donnez son habit au jardinier.

5. Translate into French: Fifteen, twenty-one, seventeen, eight dollars, of the brothers, of the father, to the mothers, one thousand, eight hundred, seventy-eight. I do not like beer. A diligent young man does not always think of his pleasures, but he thinks of his tasks. I was born on the eleventh of April, and my brother on the 15th of March.

---

DRAWING.

---

## FIRST GRADE—BOYS.

1. Draw, from memory, a table in parallel perspective, with a tumbler, bottle or vase upon it. Fine work not so important as correct perspective, To be drawn in school, and finished in one hour and thirty minutes.

2. Design and draw the plan and front elevation of a house, using any scale. This specimen to be completed in three weeks from its commencement, and to be drawn in school. Size of paper, 10x12 inches.

3. The work of the year in Intermediate Drawing Book No. 3.

---

FIRST GRADE—GIRLS.

1. Draw, from memory, a table in parallel perspective, with a tumbler, bottle or vase upon it. Fine work not so important as correct perspective. To be finished in one hour and thirty minutes.

2. See directions given for drawing the specimen in the Fifth Grade, and observe the same rules. Size of paper, 10x8 inches.
  3. The work of the year in the Intermediate Drawing Books No. 3.
- 

## SECOND GRADE.

1. Draw from the copy in the Free Hand Drawing Book No. 3, Ex. 92, a square rosette, either in the drawing book or upon paper provided by the teacher. To be drawn the same size as the pattern, and finished in one hour and thirty minutes. No instruments to be used. Size of paper, 8x7 inches.
  2. See directions for Fifth Grades, and observe the same rules.
  3. Free hand and geometrical books.
- 

## THIRD GRADE.

1. Draw from the copy in the Free Hand Drawing Book, either in the book or upon paper provided by the teacher, Ex. 61, the wine glass. To be drawn the same size as the pattern. No instruments to be used. Must be finished in one hour and thirty minutes, and be drawn in school.
  2. See directions for the Fifth Grade specimen, and observe the same rules. Size of paper, 8x7 inches.
  3. The work of the year in the drawing books, Free Hand and Geometrical.
- 

## FOURTH GRADE.

1. Draw from the copy on page 16 of the Intermediate Drawing Book No. 2, either in the book or upon paper provided by the teacher, the acanthus ornament, enlarged to twice its size. Instruments not to be used. Must be finished in one hour and thirty minutes, and be drawn in school.
2. See directions given for drawing the specimen in the Fifth Grade, and observe the same rules. Size of paper, 7x6 inches.
3. The work of the year in the drawing books.

## FIFTH GRADE.

1. Draw from the copy in the Intermediate Drawing Book No. 1, page 11, the Quatrefoil, enlarged to three inches in diameter. Draw, either in the book or upon paper provided by the teacher. No ruling allowed. To be finished in one hour and thirty minutes.

2. Draw a design, either in a geometrical figure or by horizontal repetition, in the form of a molding or border, using any element selected by the scholar. To be drawn in school, and completed within three weeks from its commencement. This will not be considered a specimen of free hand work, and may, therefore, be ruled and measured. Size of paper, 7x6 inches.

3. The work of the year in the drawing books.

---

## SIXTH GRADE.

1. The Greek and Latin Crosses, double lined, about three inches in length. Drawn in the schoolroom in one hour and thirty minutes. No ruling allowed. Drawn upon a blank page in the drawing book.

2. A drawing from memory of any figure done during the year. This must be drawn in the schoolroom, and finished within three weeks from its commencement. Instruments may be used. Size of paper, 6x5 inches.

## SEMI-ANNUAL EXAMINATION—DECEMBER, 1877.

## ARITHMETIC.

## FIRST GRADE.

Five Questions, Ten Credits Each.

1. (a) Find the L. C. M. of 39, 78, 36, 24, 30.  
(b) Give the rule for the addition of fractions.
2. (a) Express  $\frac{11}{18}$  decimally, to four decimal places.  
(b) Reduce 4 miles 16 rods  $11\frac{1}{4}$  feet 3 inches to inches, and prove by reduction ascending.
3. (a) Find the per cent. of profit in the following transaction:  
A trader buys five horses at an average price of \$42 per head, three horses at \$75 apiece and one horse for \$150. He sells the lot at one hundred dollars a head. Give the exact answer, with the fraction, if there be one, reduced to its lowest terms.  
(b) Find the cost of 17,256 lbs. of hay, at \$20 per ton.
4. If 5 men reap 52.2 acres in 6 days, how many men will reap 835.2 acres in 12 days?
5. (a) Find the commission on the purchase of 12,363 lbs. of wheat at \$2.10 per cental, at  $3\frac{1}{2}$  per cent. commission.  
(b)  $(43.5 \times 12.14) + 73.256 + 2.009 - 114.6 = ?$   
(c) Interest of \$255 at 9 per cent. for 1 year 3 months and 20 days.  
(e)  $2\frac{3}{11} + 5\frac{1}{9} + 18\frac{2}{3} + 10\frac{2}{7} = ?$   
(f) 52 is what per cent. of 78?

## SECOND GRADE.

Five Questions, Ten Credits Each.

1. (a) Find the L. C. M. of 27, 36, 51, 85, 12, 24.  
(b) Find the G. C. D. of 78, 65, 260.
2. (a) Reduce by cancellation:  $3\frac{2}{3} \times \frac{9}{13} \times 5\frac{10}{11} \times 2\frac{1}{2} \times 2\frac{2}{7} \times 3\frac{1}{3} = ?$   
(b)  $\frac{4}{5} + \frac{9}{10} + \frac{2}{3} + \frac{5}{6} + \frac{7}{8} + \frac{11}{15} = ?$
3. Reduce 5 years 11 months 29 days and 14 hours to minutes, and prove by reduction ascending. Count 30 days to a month.

4. (a) Reduce the following common fractions to decimals:  $\frac{11}{13}$ ,  $\frac{5}{32}$ ,  $\frac{17}{125}$ ,  $\frac{13}{10}$ ,  $\frac{7}{12}$ .

(b) Reduce the following decimals to common fractions in their lowest terms: .484, .0016, .28625, .5005, .0216.

5. (I.) Define the following: (a) Prime numbers. (b) Greatest common divisor. (c) Least common multiple. (d) Concrete numbers. (e) Interest.

(II.) A trader had \$500 cash on hand on the morning of November 20th, and during the next three days received and paid out money as follows:

Nov. 20. Received—\$72, \$42.50, \$5.75, \$121.63. Paid out—\$40, \$52.20, \$110.80.

Nov. 21. Received—\$14.20, \$2.50, \$11.42, \$50, \$72.10. Paid out—\$1.46, \$2.30, \$10, \$3.25.

Nov. 22. Received—\$7.50, \$7.25, \$8.40, \$11, \$21.40, \$32.05. Paid out—\$5, \$1.25.

Find the balance of cash on hand on the evening of Nov. 22d.

### THIRD GRADE.

Five Questions, Ten Credits Each.

1. (a)  $(5,824 \times 28) + (8,007 \times 259) + (724 \times 87) = ?$   
 (b) Reduce 72 days 21 hours 52 minutes to seconds, and prove by reduction ascending.
2. (a)  $2,007.24 \div 16.1 = ?$   
 (b)  $8.201 \times 6.3007 \times 4.5 = ?$
3. (a)  $6\frac{5}{11}$  yards, at \$3.30 per yard.  
 (b)  $4\frac{2}{3}$  yards, at \$2.70 per yard.  
 (c)  $7\frac{3}{4}$  yards, at 78 cts. per yard.  
 (d)  $16\frac{5}{7}$  pounds, at 91 cts. per pound.  
 (e) Find the sum of the products.
4. (a) If the sum of the digits of a number be divisible by 9, by what two numbers must the number be divisible?  
 (b) A number ends in a cypher and the sum of the digits is divisible by 3. Name *four* exact divisors of the number.  
 (c) Reduce the following fractions to decimals:  $\frac{11}{16}$ ,  $\frac{2}{3}$ ,  $\frac{17}{125}$ ,  $\frac{7}{12}$ ,  $\frac{5}{80}$ .  
 (d) How many cubic feet in a cord of wood?
5. (a)  $\frac{5}{7} + \frac{2}{3} - \frac{1}{2} - \frac{5}{6} + \frac{13}{12} + \frac{17}{12} - \frac{83}{14} = ?$   
 (b)  $\frac{5}{85} \times 17 = ?$   $\frac{16}{33} \times 22 = ?$   $\frac{4}{5} \div \frac{2}{3} = ?$   $\frac{81}{11} \div 27 = ?$   $\frac{8}{9} \times \frac{7}{16} = ?$

## FOURTH GRADE.

Five Questions, Ten Credits Each.

- (a) Reduce to lowest terms:  $\frac{87}{290}$ ,  $\frac{91}{78}$ ,  $\frac{250}{900}$ ,  $\frac{289}{1700}$ ,  $\frac{51}{85}$ .

(b) Reduce to improper fractions:  $72\frac{11}{12}$ ,  $8\frac{9}{26}$ ,  $272\frac{4}{5}$ ,  $32\frac{1}{7}$ ,  $900\frac{1}{15}$ .
- Reduce to a common denominator:
- (a)  $\frac{7}{12}$ ,  $\frac{4}{5}$ ,  $\frac{6}{7}$ . (b)  $\frac{11}{13}$ ,  $\frac{2}{3}$ ,  $\frac{1}{2}$ . (c)  $\frac{8}{9}$ ,  $\frac{4}{21}$ ,  $\frac{11}{18}$ . (d)  $\frac{11}{17}$ ,  $\frac{2}{3}$ ,  $\frac{5}{6}$ . (e)  $\frac{18}{29}$ ,  $\frac{53}{87}$ ,  $\frac{2}{3}$ .

3. (a)  $75.209 + 3.206 + 48.21 - 12.5 - 4.8 - 16.000017 = ?$

(b)  $\$4.92 \times 73 = ?$

$8.76 \times 29 = ?$

$4.59 \times 16 = ?$

$11.50 \times 58 = ?$  Find the sum of the products.
- (a)  $82960 + 702073 + 8214 - 7899 - 10829 - 453 = ?$

(b) Reduce to decimals:  $\frac{5}{6}$ ,  $\frac{11}{12}$ ,  $\frac{13}{16}$ ,  $\frac{21}{25}$ ,  $\frac{129}{125}$ .
- (a)  $13\frac{1}{2} \times 16 = ?$  (b)  $407.32 \times .05 = ?$  (c)  $814.12 - 7.1 = ?$  (d)  $1.728 \times .002 = ?$  (e)  $\frac{289}{111} \div 17 = ?$

## FIFTH GRADE.

Five Questions, Ten Credits Each.

- Find the amount of the following bill:
  - 217 pounds of sugar, at \$ .17 per pound.
  - 25 pounds of tea, at .65 per pound.
  - 116 pounds of coffee, at .21 per pound.
  - 14 dozen brooms, at 1.85 per dozen.
  - 12 cans fruit, at .35 per can.
- (a)  $7,804 + 2,987 + 2,167 - 8,798 - 2,107 - 809 = ?$  Divide the remainder by 4.

(b)  $4.826 \div 24 = ?$
3. On Monday you receive the following sums: \$72.50, \$3.75, \$82.40, \$16.21; and you pay out \$1.75, \$10, \$32.75.

On Tuesday you receive nothing, but pay out \$14.25.

On Wednesday you receive \$49.50, \$200.50, \$3.15, \$1.80, \$46.70.

Supposing that you had no money to start with on Monday morning, how much will you have on Wednesday evening?
- Find the sum of  $\frac{6}{7}$  of 98,  $\frac{3}{11}$  of 132,  $\frac{1}{8}$  of 78,  $\frac{6}{7}$  of 85, and  $\frac{11}{2}$  of 96.
- (a)  $2461 \div 15 = ?$  (b)  $48146 \div 37 = ?$



## SIXTH GRADE.

1.  $8,723 + 1,098 + 7,321 + 498 + 627 = ?$
2. (a)  $\$4\ 86 \times 8 = ?$  (b)  $\$92\ 36 \times 7 = ?$  (c)  $\$21\ 50 \times 5 = ?$  (d)  $\$76\ 21 \times 8 = ?$  (e)  $\$4\ 98 \times 4 = ?$
3. (a)  $48,216 \div 8 = ?$  (b)  $\$12,349 \div 6 = ?$  (c)  $70,016 - 8,976 = ?$  (d)  $8,142 - 3,908 = ?$  (e)  $5,621 \div 7 = ?$
4. (a) If 5 books cost 90 cents, what will 11 cost?  
(b) If you have 20 dollars and spend 5 dollars for a coat, 4 dollars for a pair of pantaloons and 2 dollars for a vest, how much will you have left?
5. If a man starts on a journey of 200 miles, and travels 5 miles an hour for 33 hours, how far will he be from his journey's end?

## GRAMMAR.

## FIRST GRADE.

Five Questions, Ten Credits Each.

1. (a) Write the plurals of axis, chimney, criterion, memorandum, wharf, journey, chorus, hero, roof, penny.  
(b) State the difference in the use of the letter s, as applied to the inflection of verbs and nouns.
2. Write a sentence containing—(a) A noun modified by a relative clause, (b) A predicate verb modified by a prepositional phrase.  
(c) Write a complex sentence containing an adjective clause.  
(d) Write a complex sentence with its members connected by an adverb of time.  
(e) What rule should be observed in the position of adverbs in a sentence?
3. (a) Write in tabular form the present, present perfect, and past tenses, indicative mood, of the following verbs: go, do, lie (to recline), lay, sit, begin, fall, write, see, feel, using the pronoun *I* as the subject.  
(b) Compare—gay, active, doleful, little, bad.
4. (a) Define—a sentence, the predicate, a preposition, a compound sentence, a phrase.  
(b) We diverged towards the Wahsatch range. We had not encountered any hostile Indians. We had seen no traces of our absent companions. Combine these three statements into a single sentence with *phrases*.

5. "To be insensible to public opinion, or to the estimation in which we are held by others, indicates anything rather than a good and generous spirit."

- State—(a) Subject of *indicates*.  
(b) Modifier of *insensible*.  
(c) Modifier of *estimation*.  
(d) Case of *spirit*.  
(e) Modifier of *are held*.
- 

## SECOND GRADE.

Five Questions, Ten Credits Each.

1. Write—(a) A single sentence containing an adverb of time; (b) one containing an adverb of manner; (c) one in which the subject is modified by a prepositional phrase; (d) one containing a predicate noun, and (e) one where the object is modified by an adjective phrase.

2. Define—Verb, preposition, subject, predicate and simple sentence.

3. Change the following prepositional phrases into adjectives or adverbs: (1) In a hurry. (2) In a calm manner. (3) By force. (4) With joy. (5) A chain of wood.

4. Combine into a single sentence the following statements, using the *noun explanatory*: (1) Longfellow wrote "Evangeline." (2) He is an American poet. (3) He is an illustrious poet.

5. (a) Write the present and past tenses, indicative mood, of do, lay, set, go, begin, find, cut, write, sing, work.

(b) Mention five uses of a noun.

---

## THIRD GRADE.

Five Questions, Ten Credits Each.

1. Write a sentence of not less than six words about each of the following objects—(1) Quicksilver. (2) Iron. (3) The grizzly bear. (4) The new City Hall. (5) Ice.

2. (a) Complete properly the following—(1) In every sentence the thing stated is called the ——— (2 credits.) (2) A set of nouns making a complete statement is called a ——— (2 credits.)

(b) Write four nouns in both numbers which form their plurals irregularly. (2 credits.)

(c) Define—Noun, verb, pronoun, subject. (4 credits.)

3. Give five different methods of forming the plurals of nouns, with one illustration of each.

4. Write the proper adjectives corresponding to the following proper nouns—Japan, Scotland, Germany, France, Ireland, Paris, Baltimore, Turkey, Norway.

---

#### FOURTH GRADE.

Five Questions, Ten Credits Each.

1. Write five sentences, each containing only four words—An article, an adjective, a noun, and a verb.

2. Complete the following sentences correctly—(1) A relation-word is called a — (2) A word which stands for a noun is called a — (3) A how, when, or where-word is called an — (4) A thought expressed in words is called a — (5) The statement of a fact is called a — sentence.

3. (a) State three uses of capital letters. (3 credits.)

(b) Write two sentences, the first containing a transitive and the second an intransitive verb. (4 credits.)

(c) Give the appropriate abbreviations of the following: Take notice, doctor of medicine, collect on delivery. (3 credits.)

4. Write the proper abbreviations of—Over, never, you are, he will, it is: using the apostrophe.

5. Write five separate statements about the City of San Francisco.

---

#### FIFTH GRADE.

Five Questions, Ten Credits Each.

1. Fill out, properly, the following sentences—(1) An action word is called a — (2) A thought expressed in words is a — (3) A name of a particular person, place or object is a — noun. (4) A verb not requiring an object to complete the sense is an — verb. (5) A word formed from an adjective by adding *ly* is generally an —

2. What is the difference between a *declarative* and an *interrogative* sentence? Give an example of each.

3. Write five sentences, each containing only three words—a noun, an adjective and a verb.

4. Write four sentences about the elephant, and then rewrite them into a single sentence.

5. Write a short composition about a clock by answering these questions—1. What is it for? 2. What is it made of? 3. What are some of its principal parts? 4. Where do we almost always see a clock? 5. What is a very small clock called, which one can carry in a vest-pocket?

---

### SIXTH GRADE.

Five Questions, Ten Credits Each.

1. Write five sentences, telling what the following workmen do—(1) The tailor. (2) The carpenter. (3) The blacksmith. (4) The undertaker. (5) The jeweler.

2. Write the names of five parts of a clock, and underline the nouns. Model: *The end of the railroad.*

3. Write five *declarative* sentences by telling something about the following objects: A ship, a teacher, a stone, a grizzly bear, an apple.

4. Change the above to *interrogative* sentences.

5. Write five nouns and five verbs.

---

### GEOGRAPHY.

#### FIRST GRADE.

Four Questions, Ten Credits Each.

No credits on misspelled names.

1. (a) Upon what circumstances does the climate of any locality depend?

(b) What current largely influences the climate of California?

2. (a) Where is the Gulf Stream first divided after leaving the Straits of Florida?

(b) What is its average velocity?

(c) How may it be traced throughout its course?

(d) What is its effect on the western coast of Europe?

(e) What is the Sargasso Sea?

3. (a) What is a river basin?  
 (b) What is the source of the Mississippi River?  
 (c) Why is it for the best that the courses of rivers are not in direct line to the sea?  
 (d) Mention a lake lying over 12,000 feet above the sea-level.  
 (e) How large is Lake Superior?
4. (a) Why is the section called Atacama, lying partly in Peru and partly in Bolivia, a desert region?  
 (b) What name is given to lines drawn on a map through places of equal mean temperature?  
 (c) How many degrees from the North Pole is the Tropic of Capricorn?  
 (d) Upon what kind of food do the inhabitants of tropical regions subsist?  
 (e) In what zones do men reach the highest development?

## SECOND GRADE.

Four Questions, Ten Credits Each.

No credits on misspelled names.

1. (a) What is the distinction between *aqueous* and *igneous* rocks?  
 (4 credits.)  
 (b) What is the basin of a river?  
 (c) What is a mountain system?  
 (d) What is a plateau?
2. How has the soil now on the earth's surface been formed?
3. (a) Into what bodies of water do the following rivers flow: Cambodia, Parana, Niger, Amoor, Columbia?  
 (b) Name—(a) The most eastern cape of South America. (b) The most northwestern cape of Washington Territory. (c) The cape at the southern extremity of Hindostan. (d) The most westerly cape of California. (e) The island lying south of Australia.
4. (a) Where is Lake Winnipeg?  
 (b) What strait leads out of Baffin Bay?  
 (c) Where is James Bay?  
 (d) Where is Cape Breton Island?  
 (e) Into what does the Cumberland River flow?

## THIRD GRADE.

Four Questions, Ten Credits Each.

No credits on misspelled names.

1. Name—(1) A river flowing into the Caspian Sea. (2) A cape on the Atlantic coast of Spain. (3) The gulf lying between Finland and Sweden. (4) A large island southeast of Greece. (5) The strait leading from the Sea of Marmora into the Black Sea.

2. (a) Locate—(1) Havre. (2) Geneva. (3) Dover. (4) Calcutta. (5) Cairo.

(b) Name—(1) The island south of the Malay Peninsula. (2) The gulf lying south of Persia. (3) The sea west of Corea. (4) The strait leading out of the Red Sea. (5) The range of mountains on the north of the Chinese Empire.

3. (a) What and where is the highest mountain in the world?

(b) To what government does the greater part of Hindostan belong?

(c) What are oases?

(d) How is the soil of Egypt fertilized?

(e) What European navigator first entered the Pacific Ocean?

4. Locate—(1) Cape Guardafui. (2) Algeria. (3) The Zambeze River. (4) Madagascar. (5) Lake Victoria Nyanza.

## FOURTH GRADE.

Four Questions, Ten Credits Each.

No credits on misspelled names.

1. (a) Locate—(1) Cape Cod. (2) Cape Hatteras. (3) Cape Mendocino. (4) Cape St. Lucas. (5) Cape Flattery.

(b) Name the capitals of—(1) Ohio. (2) Nevada. (3) Oregon. (4) New York. (5) North Carolina.

2. (a) What kind of government has the United States?

(b) How long did the war of the Revolution last?

(c) Who is the highest officer in a State?

(d) Where were the first battles of the Revolution fought?

(e) Into what is each of the States divided—except Louisiana and South Carolina?



3. (a) Name two staple products of the southern section of the Union, and three of the middle section.

(b) Who were the two most noted American commanders in the Mexican War? Who was the most prominent Mexican commander? What territory did the United States acquire as a result of that war? (2 credits.)

4. (a) Into what do the following rivers flow: Mohawk, Genesee, Niagara, Delaware, Susquehanna?

(b) Locate—New Orleans, Raleigh, Atlanta, Mobile, Charleston.

---

#### FIFTH GRADE.

Four Questions, Ten Credits Each.

No credits for misspelled names.

1. (a) What sort of a government has the United States?

(b) What do you call the territory drained by a river and its tributaries?

(c) Where is the Strait of Magellan?

(d) How are North and South America connected?

(e) What large bay west of Greenland?

2. (a) Locate—Cape Blanco, Cape St. Lucas, Cape Horn, the Sandwich Islands.

(b) Into what body of water does each of the following rivers flow: Amazon, Mississippi, La Plata, Columbia, Yenesei?

3. (a) What natural division is Arabia?

(b) What strait leads out of the Mediterranean Sea?

(c) What important group of islands in the eastern part of Asia?

(d) Where are the Bahama Islands?

(e) What mountains extend through Mexico?

4. (a) Give the length of California from north to south.

(b) Give its average breadth.

(c) Name the two great rivers of California.

(d) Name two counties bordering on the bay of San Francisco.

(e) Name two important lakes in the State.

## SPELLING.

---

### FIRST GRADE.

Forty Words, One Credit Each.

NOTE.—The proper use of capitals strictly required.

Forfeit, alien, perjury, balance, remedy, indicative, imperative, infinitive, multiplicand, Michigan, inseparable, avarice, delicacy, plausible, aqueous, igneous, receive, vigilance, conscience, paralyzed, San Joaquin, Alameda, Berkeley, parricide, attachment, fervent, prejudice, Sacramento, intrepid, ascending, universal, transcendent, fervid, germinate, elevate, Cincinnati, elementary, intelligence, century, colossal.

---

### SECOND GRADE.

Succor, serenity, ethereal, radiance, aqueous, igneous, plateau, Vesuvius, Louisiana, pavilion, colonnade, castanet, reverie, Tamalpais, Sacramento, serenade, requisite, San Jose, invincible, receive, multiplicand, comparative, positive, divisor, separate, Kennebec, Delaware, adjective, infinitive, criticism, excellent, architect, San Rafael, Benicia, destiny, suffrage, imminence, calamity, religious, horizon.

---

### THIRD GRADE.

Verdure, grammar, exercise, Alameda, Louisiana, multiplicand, adjective, implements, leisurely, charity, surprise, physician, wholesome, consciousness, unpleasant, opposite, delicate, incident, vehicle, concern, desirous, orchestra, agreeing, victories, revelry, vigor, verge, original, Tennessee, Delaware, imperative, legacy, persuade, possible, receive, artificial, peaceful, sympathies, despair, Oregon.

---

### FOURTH GRADE.

Idiot, cabinet, decide, Chesapeake, Michigan, tiers (rows), business, conceive, appearance, absence, Chicago, Massachusetts, Merrimac, docile, circuit, species, harness, rugged, manifest, receive, California, Sacramento, college, vigorous, academy, diligence, tuition, conscience, evidence, review, advantages, San Francisco, careful, carcass, strength, Alameda, description, chiefly, seizes, preceding.

## FIFTH GRADE.

California, San Francisco, Sacramento, furnish, service, premises, family, grammar, received, purpose, succeed, fatigue, prisoner, distance, journey, relieve, further, crutches, errand, disperse, present, mischief, seizing, surprised, diamond, famine, chariot, San Joaquin, Los Angeles, governor, desperate, gratitude, favorite, presence, hesitating, believe, comical, syllable, indolent, scarlet.

## SIXTH GRADE.

Guilty, instead, money, ignorant, search, parcels, hymn, cousin, answer, meddled, mischief, sleeve, believed, deceived, destroy, bosom, sincere, people, apiece, prisoners, balance, animals, wreck, succeed, traveler, perfect, language, distress, prayers, repeat, spirit, tongue, merrily, modesty, manage, truant, struggling, watery, obey, drowned.

## MUSIC.

## FIRST AND SECOND GRADES.

1. What is an interval?
2. How are intervals measured?
3. By what intervals are sharp and flat scales transposed?
4. What are intermediate tones, and between what tones of the scale do we find them?
5. Between what tones do we find major seconds, major thirds, minor thirds and octaves?
6. How many steps are contained in the augmented second, the minor third and the major third?
7. What will a dot add to the length of a note or rest, and, when two are used, what is the value of the second?
8. Write the major scale in the following keys: B $\flat$ , F, E, A $\flat$ .
9. Write the chromatic scale, ascending and descending.
10. Place notes upon staff in key of A,  $\frac{4}{4}$  measure, in position indicated by the following scale names:

3.1.5.4. | 6.2. $\sharp$ 4.5. | 8.3. | b7.6.4. | 5.7.2.6.4.8. | 1.||

## THIRD GRADE.

1. For what is the staff used?
2. For what is the clef used?
3. What notes are sharped in the keys of G, D and A major?
4. What is the brace, and what does it indicate?
5. A measure having twelve parts is called what?
6. The interval from 1 to 3 in a major scale is what kind of a third?
7. Write the syllables, do, mi, sol, si, upon staffs; signature of three sharps.
8. Write the syllables, re, fa, la, do, upon staffs: signature of two flats.
9. Write the scale in keys of F and D major.
10. Place notes upon staff, signature one flat,  $\frac{4}{4}$  measure, in position indicated by the following scale names:  
5.3. | 6.4.7 | 2.8.6.3.5.4. | 3.7.2.1.8.||

## FOURTH GRADE.

1. What represents the different length of tones?
2. Of what use are added lines?
3. When  $\frac{4}{4}$  is written upon a staff, what does each figure indicate?
4. How is a repeat made, and what does it mean?
5. What is a clef?
6. What does the G clef indicate?
7. What is a close, and what does it signify?
8. Describe the accent of 4 kinds of measure.
9. Write the scale in the keys of C and G.
10. Place notes upon staff, in key of G, in position indicated by the following scale names:  
3.5.2.8.4.7.6.5.8.3.1.

## FIFTH GRADE.

1. What is a major diatonic scale?
2. What is a staff, and what is its use?
3. Between what numbers of the scale do we find half-steps, or minor seconds?
4. What letters are used as the pitch names of tones?

5. Write the scale in the key of C, with scale and pitch names.
  6. What is the use of bars?
  7. Describe the accent of triple, quadruple and sextuple measure.
  8. Give the *scale* names of do, sol, fa, la, si, mi.
  9. What is the close, and what does it signify?
  10. Write upon staff in key of C, the following notes: mi, do, sol, re, si, fa, la, sol, re, do.
- 

## SIXTH GRADE.

1. Make the notes and rests in common use.
  2. Make the scale of C upon staff, and write under the notes the pitch names, scale names and syllables.
  3. Describe the beats in triple and quadruple measure.
  4. What is a slur?
  5. When  $\frac{2}{4}$  is written upon the staff, what does each figure indicate?
  6. For what are bars used?
  7. Where are the half-steps found in the major scale?
  8. What are the names of notes found on the first, second and third lines of the staff?
  9. What is the sign when music is to be performed very softly?
  10. How is a measure represented?
- 

## SPECIAL EXAMINATION.

SAN FRANCISCO, AUGUST, 1878.

---

## ARITHMETIC.

## SECOND GRADE.

Eight Questions, Five Credits Each.

NOTE—Allow half credits for correct process.

1. (a) Find the L. C. M. of 75, 81, 84, 100, 90, 91, 27, 39. (2 credits.)  
 (b) Find the G. C. D. of 42 and 84, of 51 and 85. (2 credits.)

(c) What is a prime number? (1 credit.)

2. A man owns  $\frac{4}{5}$  of a distillery. He sells 10 per cent. of his share and dies, leaving the remaining interest to his two sons equally. The value of one son's share was \$2,250. Find the value of the distillery.

3. (a) Reduce  $\frac{11}{12}$  to a decimal of six places. (2 credits.)

(b) Find the sum and the difference of 72.0043, and 2.146207. (2 credits.)

(c) Add  $\frac{4}{5}$ ,  $\frac{2}{13}$ ,  $\frac{9}{10}$ ,  $\frac{6}{7}$ ,  $\frac{1}{8}$ . (1 credit.)

4. (a)  $216\frac{5}{9} \div 3\frac{3}{4} = ?$  ( $2\frac{1}{2}$  credits.)

(b)  $5\frac{2}{3}\%$  is  $12\frac{1}{2}\%$  per cent. of what? ( $2\frac{1}{2}$  credits.)

5. (a) Find  $11\frac{1}{2}\%$  per cent. of \$940.25. ( $2\frac{1}{2}$  credits.)

(b)  $16\frac{2}{11}\%$  is 12 per cent. of what? ( $2\frac{1}{2}$  credits.)

6. Find the interest of \$1,012 at 8 per cent per annum, for 11 months, 18 days.

7. (a) Reduce  $\frac{11}{4}$  of a square rod to feet. ( $2\frac{1}{2}$  credits.)

(b) Reduce  $25\frac{2}{3}$  rods to feet. ( $2\frac{1}{2}$  credits.)

8. Find the cost of digging a cellar 42 feet long,  $24\frac{1}{3}$  feet wide, and 9 feet high, at 59 cents a cubic yard.

### THIRD GRADE.

Eight Questions, Five Credits Each.

1. J. C. Brown bought  $59\frac{1}{2}$  tubs at \$12.25 per dozen,  $17\frac{3}{4}$  dozen buckets at \$9.15 per dozen, 7 cases coal oil at \$5.00 per case, 26 dozen fruit at \$2.75 per dozen.

Make out the bill and find the amount.

2.  $7,264 + 2,198 - 830 - 999 - 1.04 + 62.4067 + 10.10 - 294.06 = ?$

3.  $\frac{5}{11} + \frac{1}{22} + \frac{1}{7} + \frac{5}{7} + \frac{1}{2} + \frac{3}{4} = ?$

4. (a) Reduce to their least common denominator:  $\frac{11}{12}$ ,  $\frac{5}{8}$ ,  $\frac{1}{4}$ ,  $\frac{15}{16}$ ,  $\frac{4}{5}$ ,  $\frac{9}{10}$ . (2 credits.)

(b) Reduce to lowest terms:  $\frac{51}{85}$ ,  $\frac{200}{844}$ ,  $\frac{91}{260}$ ,  $\frac{21}{98}$ . (2 credits.)

(c)  $\frac{15}{89} - \frac{2}{3} = ?$  (1 credit.)

5. (a) How many cubic feet in  $4\frac{1}{4}$  cords of wood? (1 credit.)

(b) How many ounces in  $11\frac{3}{4}$  pounds of salt? (1 credit.)

(c) How many pounds in  $216\frac{1}{2}$  ounces of silver? (1 credit.)

(d) Reduce  $13\frac{1}{4}$  bushels to quarts. (1 credit.)

(e) Reduce 5 square rods to square yards. (1 credit.)

6. Find the cost of excavating a cellar 32 feet long,  $14\frac{1}{2}$  feet wide, and 12 feet high, at 52 cents per cubic yard.



7. If I borrowed \$850 on January 20th, at 8 per cent. interest per year, how much did I owe on the 30th day of October?

8. Reduce 14 pounds, 15 shillings, 11 pence, 2 farthings, to farthings, and prove by reduction ascending.

## FOURTH GRADE.

Eight Questions, Five Credits Each.

NOTE.—Allow half credits for correct process.

1.  $7,248 \times 609 + 26,489 - 7,082 - 99 - 1,624 = ?$

2. Find the cost of 855 lbs. sugar at 11 cents, 429 lbs. salt at  $2\frac{1}{8}$  cents, 94 lbs. coffee at 22 cents, 85 dozen eggs at 25 cents and 27 sacks of potatoes at \$1.25.

3. Subtract 2,862 from the sum of 4,896, 299 and 6,284; divide the remainder by 122 and multiply the quotient by 308; what is the result?

4. (a) Reduce to improper fractions:  $7\frac{9}{11}$ ,  $8\frac{2}{15}$ ,  $2\frac{5}{9}$ ,  $306\frac{11}{12}$ ,  $16\frac{15}{16}$ . ( $2\frac{1}{2}$  credits.)

(b) Reduce to whole or mixed numbers:  $\frac{700}{18}$ ,  $\frac{202}{32}$ ,  $\frac{151}{9}$ ,  $\frac{187}{4}$ ,  $\frac{91}{13}$ . ( $2\frac{1}{2}$  credits.)

5. (a) If 13 pairs of shoes cost \$39, what will 27 pairs cost? ( $2\frac{1}{2}$  credits.)

(b) If a horse eat  $\frac{2}{3}$  of a bale of hay in a week, how many bales will he eat in a month containing 31 days? ( $2\frac{1}{2}$  credits.)

6.  $\frac{7}{8} + \frac{2}{3} = ?$   $\frac{5}{9} - \frac{1}{2} = ?$   $6\frac{2}{3} \times 18 = ?$   $5\frac{1}{2} \times 44 = ?$   $21\frac{6}{7} \times 49 = ?$

7.  $2.146 + .00732 - .0333 \cdot 11.20602 - .007061 = ?$

8. Find the interest of \$3.1 at one per cent. a month, for 7 months and 20 days.

## FIFTH GRADE.

Eight Questions, Five Credits Each.

1.  $5,286 + 9,074 + 8,206 + 290 - 824 - 967 - 276 - 84 = ?$

2. Multiply 24,589 by 75, and divide the product by 36.

3. (a) What is an improper fraction? (2 credits.)

(b) How do you reduce an improper fraction to a whole or mixed number? (3 credits.)

4. What name do you give to the answer in addition? In subtraction? In multiplication? In division? What is a proper fraction?

5. Reduce— $8\frac{5}{11}$ ,  $20\frac{1}{2}$ ,  $5\frac{7}{8}$ ,  $2\frac{5}{12}$ ,  $6\frac{9}{10}$ .

6. Bought 25 lbs. sugar at 13 cents, 87 lbs. potatoes at 2 cents, 325 lbs. flour at 3 cents, 12 dozen eggs at 25 cents, 7 cans matches at \$1 80. Find the amount.

7.  $(\frac{7}{11} \text{ of } 99) + (\frac{4}{5} \text{ of } 35) + (\frac{2}{3} \text{ of } 60) + (\frac{8}{9} \text{ of } 72) + (\frac{1}{4} \text{ of } 48) = ?$

8.  $5,966 \div 54 = ?$

## GRAMMAR.

### SECOND GRADE.

Six Questions, Five Credits Each.

NOTE.—Allow half credits for correct process.

1. What is an adjective? A sentence? A predicate noun? A phrase? A conjunction?

Rule your paper suitably and write in the proper column each word in the following sentences:

1. (a) There lay floating in the sea an immense irregular mass.

(b) Some men are born to fortune, others achieve it.

(c) O, how very sad is this bereavement!

3. In what five ways can a noun be used in a sentence? Illustrate.

4. Write:

(a) A sentence containing a predicate adjective. (1 credit.)

(b) A sentence containing a participial phrase. (1 credit.)

(c) A sentence containing a masculine proper noun modified by an adjective phrase, a verb in the future tense modified by an adverbial phrase and a noun in the objective case. (3 credits.)

5. (a) Write a sentence containing the past tense of go, write, day, lie (to recline), eat. ( $2\frac{1}{2}$  credits.)

(b) Write five sentences containing the present perfect tense, indicative mood, of set, sit, go, come, run. ( $2\frac{1}{2}$  credits.)

6. Give examples of two common errors in the use of—

(a) pronouns. (1 credit.)

(b) the past tense of verbs. (1 credit.)

(c) adjectives. (1 credit.)

(d) Correct "every scholar recited their own lesson," and give the reason for the correction. (2 credits.)

## THIRD GRADE.

Six Questions, Five Credits Each.

1. Distribute properly into columns all the words in the following:  
    "I had a little bird;  
    My only friend was he;  
    And many a time my heart was stirred  
    With his sweet melody."
  2. (a) Give five uses of capital letters. ( $2\frac{1}{2}$  credits.)  
    (b) Name four kinds of sentences. (2 credits.)  
    (c) What is a sentence? ( $\frac{1}{2}$  credit.)
  3. Give the present and past tenses of ten irregular verbs.
  4. Write:  
    (a) A sentence containing a predicate noun.  
    (b) One containing a limiting adjective.  
    (c) One containing the superlative of *bad*.  
    (d) One introducing the word *woman* in the possessive plural.  
    (e) One containing the possessive plural of *dwarf*.
  5. Form adjectives from the following nouns: 1. Hope. 2. Health  
3. Noise. 4. Fancy. 5. Excess.
  6. (a) Give the adjectives formed from: 1. Sweden. 2. Holland  
3. Peru. 4. Japan. 5. Paris. ( $2\frac{1}{2}$  credits.)  
    (b) Give the plurals of: is, he, has, me, she, gives, was, potato,  
wharf, am. ( $\frac{1}{4}$  credit each.)
- 

## FOURTH GRADE.

Six Questions, Five Credits Each.

NOTE. —Allow half credits for correct process.

1. Rule your paper properly and put in the proper column each kind of word in these sentences:  
    (a) Seven fine large vessels went down in that fearful storm.  
    (b) Stephen and you and I are all nearly of an age.
2. Define a noun, a verb, an adjective, a declarative sentence, an interrogative sentence.
3. Write five sentences containing the possessive plurals of man, aunt pony, dwarf, chief.

4. (a) Name three kinds of adjectives, giving an example of each. (3 credits.)
- (b) Write out the full form of: 1. Ne'er. 2. O'er. 3. Aren't, 4. He'll. (2 credits.)
5. Give five uses of capital letters, illustrating each.
6. Form one sentence, stating your name, your birth-place, your present residence (giving street and number), the name of your school, the name of your teacher, your grade and the studies you are pursuing.

---

### FIFTH GRADE.

Six Questions, Five Credits Each.

1. Rule the paper properly and put in the right columns all the words in the following sentences:
  - (a) The vessels in the bay are now quite numerous.
  - (b) O, see that beautiful white cloud in the sky!
  - (c) That front seat belongs to John Emerson, the best boy in school.
2. Mention five uses of capital letters, and give an example of each.
3. What is an adverb? a proper noun? a verb? an adjective? a common noun?
4. Write five sentences, each containing only *four* words—an article, a noun, a verb and an adverb.
5. (a) Form adjectives from the following verbs: eat, drink, blame, tax, teach.
- (b) Form adjectives from the following nouns: fancy, hope, fear, mercy, doubt.
6. Write four separate statements about a steamboat, and then unite them into a single sentence.

---

## GEOGRAPHY.

### SECOND GRADE.

Six Questions, Five Credits Each.

NOTE.—Allow half credits for correct process.

1. (a) Define aqueous, igneous, stratified. ( $1\frac{1}{2}$  credits.)
- (b) State the difference between the grand divisions of the continents in regard to the coast lines. ( $3\frac{1}{2}$  credits)

2. (a) Where are the most elevated plateaus in the world? (2 credits.)  
 (b) What is their altitude? (1 credit.)  
 (c) Mention four of the ranges composed in the great mountain system of Europe. (2 credits.)
3. Locate Quito, Lake Titicaca, Mount Rainier, Cape Prince of Wales, Lake Winnipiseogee.
4. (a) Mention two noted earthquakes, with their dates. (2 credits.)  
 (b) Name a region that has been sinking, and one that has been slowly rising for many years. (2 credits.)  
 (c) Where are the Llanos? (1 credit.)
5. Into what bodies of water do the following rivers flow: The Susquehanna, Monongahela, Delaware, Niagara, Mohawk?
6. Locate—Lima, Seattle, Chicago, Portland, Yeddo, Liverpool, Nashville, Cape Gallinas, Strait of Babelmandeb, Cape Flattery.

### THIRD GRADE. .

Six Questions, Five Credits Each.

1. Define table-land, isthmus, oasis, peninsula, meridian.
2. Locate—The Mediterranean Sea, Malacca, Cape Flattery, the Juniata River, Mount Washington, Ceylon, Seattle, Honolulu, Cuba, Cape St. Lucas.
3. State the dimensions of California, name its two great valleys, three of its large lakes, and locate three prominent cities of the State.
4. Name the capitals of—1. Pennsylvania. 2. Missouri. 3. Oregon. 4. Tennessee. 5. Louisiana. 6. Nevada. 7. Florida. 8. Texas. 9. Washington Territory. 10. Wisconsin.
5. Name and locate five important rivers of the Atlantic coast of the United States.
6. (a) Name three States bounded on the north by the forty-second parallel of latitude. (3 credits.)  
 (b) Where is Chicago? Mount Rainier? (2 credits.)

## FOURTH GRADE.

Six Questions, Five Credits Each.

NOTE.—Allow half credits for correct process.

1. What is a delta? a river basin? an oasis? a plateau? a promontory?
2. Locate the following: 1. The Kennebec River. 2. Hayti. 3. Cape Cod. 4. Lake Tulare. 5. Chesapeake Bay.
3. Name—1. A State which formerly belonged to Mexico. 2. A State purchased from the French. 3. A State bought from Spain. 4. A city of the United States founded by the Spaniards. 5. The lake north of Wisconsin.
4. (a) Name and locate four large cities, not capitals, in the Southern States. (2 credits.)  
(b) What two large rivers form the Columbia? (1 credit.)  
(c) Name and locate four important cities, not capitals, in the Eastern or Middle States. (2 credits.)
5. Give the capitals of ten of the States of the Union, with the abbreviations of the names of the States. Model: Tenn., Nashville.
6. Give the length and breadth of California; name and locate five important cities or towns, three large lakes, two prominent mountain peaks, two capes, four rivers and two mountain ranges.

## FIFTH GRADE.

Six Questions, Five Credits Each.

1. Define desert, oasis, metropolis, meridian, sound.
2. Locate—
  - (a) Cape Mendocino.
  - (b) Lake Tahoe.
  - (c) Baffin's Bay.
  - (d) Behring's Straits.
  - (e) The Sierra Nevada Mountains.
3. (a) Name the two great valleys of California. (1 credit.)  
(b) The chief city of Oregon. (1 credit.)  
(c) The largest city in the United States. (1 credit.)  
(d) A bay on the southern coast of California. (1 credit.)  
(e) The largest city in the world. (1 credit.)
4. Name and locate three mountain peaks and two lakes of this State.



5. (a) Name two important articles of import into San Francisco county, and tell where they come from. (2 credits.)

(b) What three European nations first came to America? ( $1\frac{1}{2}$  credits.)

(c) Name three important cities in the Southern States. ( $1\frac{1}{2}$  credits.)

6. (a) Where do the Esquimaux live? (1 credit.)

(b) Where do the silver bars come from which are brought to San Francisco? (1 credit.)

(c) When was California ceded to the United States, and when admitted into the Union? (2 credits.)

(d) To what government does Cuba belong?

QUESTIONS USED IN THE ANNUAL EXAMINATION  
OF THE GIRLS' HIGH SCHOOL, 1878.

---

GEOMETRY.

---

SENIOR CLASS.

Ten Questions, Five Credits Each.

1. Define and draw:
  - (a) A segment of a circle.
  - (b) An inscribed polygon.
  - (c) A tangent to a circle.
  - (d) An inscribed angle.
  - (e) Two similar triangles.
2. Show that the two acute angles of a right angled triangle are together equal to one right angle.
3.
  - (a) When is a theorem the converse of another theorem?
  - (b) If two circles intersect, what is the relation of the line joining the centers to the radii of the circles? (Answer by formula.)
  - (c) How many tangents to a circle can be drawn from a point outside the circle?
  - (d) Give four of the modifications of the proportion:  $a : b = c : d$ .
  - (e) How large is an angle formed by two secants, which include arcs of 137 degrees 30 minutes, and 25 degrees 18 minutes, respectively?
4. Prove that the radius which is perpendicular to a chord bisects the arc subtended by the chord.
5. Why can only one tangent be drawn at one point of a circumference?
6. Show that the four angles of an inscribed quadrilateral are together equal to four right angles.
7. Show how to find the center of a given circle.
8. Find the fourth proportional to three straight lines. Solve and demonstrate.
9. Prove that the straight line bisecting the angle at the vertex of a triangle divides the base into two parts proportional to the sides of the triangle.
10. Prove that the angle formed by a tangent and a chord, its vertex being the point of tangency, is measured by one-half the included arc.

## SENIOR CLASSES.

Five Questions, Ten Credits Each.

1. Define—1. Magnitude. 2. A solid. 3. A right angle. 4. A point.
5. A curved line. (10 credits.)
2. Draw and define—1. An angle. 2. A triangle. 3. An isosceles triangle. 4. A circle. 5. A theorem. (10 credits.)
3. State the theorem, draw a diagram and demonstrate the first proposition in your book. (10 credits.)
4. Prove that in any triangle the sum of the three angles is equal to two right angles.
5. Proposition XI, Book IV.

## ALGEBRA.

## MIDDLE CLASSES.

Ten Questions, Five Credits Each.

1. Given, to find  $x$  and  $y$ ,  $3x + 5y = 29$ .  
 $4x - 2y = 4$ .
2. Find two numbers, such that half the first with a third of the second makes 9, and a fourth of the first and a fifth of the second make 5.
3. Divide 90 into three such parts that twice the first plus 40, three times the second plus 20 and four times the third plus 10 shall be equal to one another.
4. Find the square root of  $1 + 4x + 10x^2 + 20x^3 + 25x^4 + 24x^5 + 16x^6$ .
5. Square root of 340,068,392.
6. Find the cube root of  $5x^3 + x^6 - 3x^5 - 1 - 3x$ .
7. State the laws of Newton's Binomial Theorem in respect to—1. The number of terms. 2. Signs. 3. Letters. 4. Exponents. 5. Coefficients.

## MIDDLE CLASSES,

ADDITIONAL QUESTIONS ON ADVANCED WORK.

Five Questions, Two Credits Each.

1. How many roots has a quadratic equation? Prove it by an equation.

2. Sum of 10 terms of the series 2 . 6 . 18., etc.
  3. Sum of 100 terms of the series 1 . 3 . 5 . 7.
  4. Solve—  

$$x + y = 12.$$

$$xy = 35.$$
  5. Solve—
- 

## JUNIOR CLASSES.

Ten Questions, Five Credits Each.

1. Define co-efficient and exponent and illustrate the difference.
  2. Explain the difference between Arithmetical and Algebraic subtraction.
  3. Find the L. C. M. and G. C. D. of  $x^2 - 4x - 21$ ,  $x^2 - 12x + 35$ , and  $x^2 + 5x - 84$ .
  4. From  $(7a + c)^2$  take  $(4a - 2c)^2$ .
  5. Factor  $27a^3 - 64$  and  $36a^4b^4c^2 - 9a^6$ .
  6. Multiply  $\frac{x^2 - b^2}{bc}$  by  $\frac{x^2 + b^2}{b + c}$
  7. Divide the number 90 into four such parts that the first increased by 2, the second diminished by 2, the third multiplied by 2, and the fourth divided by 2, shall all be equal to the same quantity.
  8. What number is that from which if five be subtracted,  $\frac{3}{5}$  of the remainder will be 40?
  9. The greater of two numbers exceeds the less by 14, and three times the greater is ten times the less; what are the numbers?
  10. A man is now 25 years old, and his youngest brother is 15, how many years must elapse before their ages will be as 5 to 4?
- 

## MENTAL ARITHMETIC.

## SENIOR AND MIDDLE.

25 credits.

1. At  $\frac{3}{4}$  of a dollar a yard how many yards of cloth can you buy for \$30?
2. Cost of 75 eggs at 30c. a dozen?
3. How many minutes in  $\frac{3}{4}$  of a day?

4. Value of  $\frac{3}{4}$  of a pound of gold at \$16 an ounce?
5. How many cubic inches in 5 gallons of water?
6. How many feet in 7 rods?
7. How many rods in  $\frac{5}{8}$  of a mile?
8. How many feet of surface on a cube whose edge is 12 inches?
9. Cube of  $\frac{5}{8}$ ?
10. Square root of 1,600?
11. How many inches in 3 meters?
12. Cube of 1.2?
13. Write in decimal form  $\frac{1}{4}$  of one per cent?
14. What number increased by 25 per cent. of itself equals 2,500?
15. Bought butter at 30c. and sold at 40c.; per cent. of gain?
16. Interest on \$800 at  $1\frac{1}{4}$  per cent. a month, for 14 days?
17. Multiply \$5.00 by \$3.50.
18. Cost of 87 eggs at 30c. a dozen?
19. Interest on \$5.00 at 10 per cent. for 2 years, 3 months?
20. What is the difference between 4 square miles and 4 miles square?
21. 9 is what per cent. of 8?
22. Cube root of .125?
23. Cost of  $5\frac{1}{2}$  tons of wheat at  $1\frac{1}{2}$ c. per pound?
24. From \$5.20 take \$1.75.
25. What is 1,200 per cent. of 9?

---

### JUNIORS.

1. Bought sugar at 10c. a pound; for how much must I sell it to gain 20 per cent?
2. What per cent of 5 is 4?
3. Divide the decimal .24 by .003.
4. At  $\$ \frac{2}{3}$  apiece, how many knives can you buy for \$20?
5. At 20c. a pound, how many pounds of raisins can you buy for \$15?
6. How many ounces in a ton of sugar?
7. Interest of \$25.50 for 2 years, at 10 per cent.?
8. 16 is 8 per cent. of what number?
9.  $\frac{1}{4}$  is what per cent. of  $\frac{1}{2}$ ?
10. Divide  $\frac{2}{3}$  by  $\frac{3}{4}$ .
11. 72 is  $\frac{8}{15}$  of what?
12. Cost of  $\frac{3}{4}$  of a pound of gold at \$16 an ounce?
13. Change  $\frac{3}{4}$  to a decimal.
14. Divide .25 by .005.

15. Interest of \$200 for 1 year 6 months, at 10 per cent?
16. The amount is \$48; the rate is 20 per cent; find the base
17. Multiply 1.2 by 1.2.
18. Cost of  $7\frac{3}{4}$  yards of cloth at 16 cts. a yard.
19. Add  $\frac{3}{4}$  of 12, and  $\frac{2}{3}$  of 18.
20. Divide 17 by  $\frac{3}{8}$ .
21. How many rods in  $\frac{7}{8}$  of a mile?
22. Square root of 6400?
23. \$18 is  $\frac{3}{4}$  of what?
24. Interest of \$400 for 60 days at  $1\frac{1}{4}$  per cent. a month?
25. Multiply  $\$2\frac{1}{2}$  by  $\$2\frac{1}{2}$ .

## ARITHMETIC.

### SENIOR AND MIDDLE CLASSES.

#### PART I.

Ten Questions, Three Credits each—Time Limited to Exactly One Hour.

NOTE—These ten questions must be worked according to blank book models; otherwise, no credits. Indicate the work in figures and write out the analytical solution.

1. Multiply 160 by  $\frac{5}{8}$ .
  2. Divide 1,200 by  $\frac{2}{3}$ .
  3. Multiply  $\frac{5}{9}$  by  $\frac{7}{8}$ .
  4. Divide  $\frac{5}{7}$  by  $\frac{2}{3}$ .
  5. Add  $\frac{3}{7}$ ,  $\frac{2}{3}$ ,  $\frac{4}{5}$ .
  6. Add  $\frac{7}{2}$ ,  $\frac{3}{6}$ ,  $\frac{3}{8}$ ,  $5$ .
  7. Divide  $3529\frac{5}{7}$  by 5, and explain how you find the fractional part of the quotient.
  8. From 270 take  $144\frac{3}{8}$ .
  9.  $\frac{5 \times 9}{3 \times 6 \times 6} \times 60 = ?$
  10.  $3555\frac{5}{7} \div \frac{3}{4} = ?$  shortest method.
- Send the papers to the office at once without crediting.

#### PART II.

Five Questions, Six Credits Each—Time One Hour Precisely.

1. G. C. D. of 333, 414, 714.



2. L. C. M. of 316, 392, 553.
3. Change 1 mile to meters.
4. (a) How many square yards of surface, and  
(b) How many cubic feet of air in a room  $33\frac{1}{2}$  feet square by 13 feet 6 inches high?
5. Divide 4 square yards, 5 square feet, 75 square inches by 3.

## PART III.

Five Questions, Eight Credits Each—40. Time  $1\frac{1}{4}$  Hours.

1. How many feet, board measure, in 25 pieces of scantling, each 10 feet long, 4 inches wide, and 3 inches thick? Cost at \$30 per M.
2. Sold a house for \$6,337.50 and lost  $2\frac{1}{2}$  per cent: Cost of house?  
On the 10th of January, 1876, you hired of Julius Cæsar, \$5,000, at 10 per cent. a year, and gave your note, payable on demand: write the note (4 credits); compute the interest up to May 15, 1878, and find the amount due. (4 credits.)
4. (a) The amount is \$48; the rate 20 per cent. Find the *Base*. (4 credits.)  
(b) Find the square root of 195,364. (4 credits.)
5. (a) Interest on \$237.50 for 1 year 11 months 11 days, at 10 per cent.  
(b) (1) Define Interest. (2) Discount. (3) Commission. (4) Capital.

---

## HISTORY.

---

## MIDDLE CLASSES.

Ten Questions, Ten Credits Each.

1. (a) What are the three races belonging to Modern History? (b) Whence did they come originally? (c) And when?
2. (a) Who were the Saracens? (b) Who was the founder of their faith? (c) And what part of Europe did they conquer?
3. When, by whom, and for what were the Crusades undertaken, and what were their results and effects?
4. State the limits of the "Dark Ages." Why so called?
5. Name five inventions made during mediæval history.

6. When and by whom was printing invented, and what effect had the invention on civilization?

7. Who were (1) Bacon. (2) Newton. (3) Galileo. (4) Harvey. (5) Shakespeare. (6) Milton. (7) Racine. (8) La Fontaine. (9) Rubens. (10) Kepler?

8. State the cause of the French Revolution, name five leading characters in it and name its results?

9. Who were (1) Adam Smith. (2) Voltaire?

#### JUNIOR CLASSES.

1. Name the three great historic divisions of the human race, state what people were included in each, and state the most progressive of the divisions.

2. What have we derived from—

1. The Phœnicians. 2. The Hebrews. 3. The Greeks.

4. The Romans. 5. The Teutonic races.

3. What are—1. The Zend Avesta. 2. The Vedas. 3. The Koran.

4. The Bible. 5. The Iliad.

4. (1) When and how did the Roman Empire begin? (2) When was it at the height of its power, and what did it include; (3) and when and by whom was it overthrown?

5. (1) When was Greece at the height of its power? (2) What were its three chief States, and when and by whom was it finally conquered?

6. (1) Name ten leading persons of ancient Greece, and state briefly what each was. (2) Ditto, Rome.

7. Name five historic battles of the Greeks, and state with whom fought. Ditto, Romans.

8. Make a brief statement about the religions, and name the chief deities of—1. The Egyptians. 2. The Hebrews. 3. The Greeks. 4. The Romans.

9. Make some statement about the Romans in respect to—1. Dress. 2. Food. 3. Baths. 4. Amusements. 5. Slaves.

10. Ditto, the Greeks.

## LITERATURE

## MIDDLE CLASSES.

## PART I.

## Fifty Credits.

1. I. Page 89, Cathcart's Lit. Reader, third line; parse *Tappan Zee*.  
 II. Page 89, tenth line; parse *that*.  
 III. Page 89, last line; parse *only*.  
 IV. Page 214, sixth line; parse *singing*.  
 V. Page 215, ninth line; parse *ask*.
2. I. Page 107, last line of third stanza; *pride*.  
 II. Page 107, first line of fourth stanza; *thee*.  
 III. Page 107, last line of fourth stanza; *such*.  
 IV. Page 108, seventh line of last stanza; *child*.  
 V. Page 108, last line of last stanza; *laid*.
3. I. Page 210, State No. of simple, complex and compound sentences in first three stanzas.  
 II. Analyze "Life is but an empty dream!" First stanza.  
 III. Dispose of, "Dust thou art, to dust returnest." Second stanza.  
 IV. Parse *to labor* in last stanza, last line.  
 V. Kind of sentence is last stanza?
4. I. Page 370, in Declaration of Ind., how many simple, complex and compound sentences in the first paragraph?  
 II. Analyze last sentence of first paragraph on page 371.
5. Analyze and define:
 

1. Occasion.	5. Predominate.	9. Attention.
2. Affecting.	6. Inferred.	10. Oppressor.
3. Anniversaries.	7. Adventures.	
4. Productiveness.	8. Correctum.	

## PART II.

## General and Literary.

1. I. Shakespeare—Born? Died?  
 II. Rank as a writer?  
 III. Why?  
 IV. Quote 10 lines from the *Seven Ages*.  
 V. Quote Shakespeare on *Mercy*.

2. I. The best works of Pope?  
 II. The best works of Goldsmith?  
 III. Rank of Emerson?  
 IV. Name five of Thackeray's novels.  
 V. Quote from two of Tennyson's poems, and state what poems.
3. I. Classify all the authors you have taken up, as poets, historians,  
 etc.  
 II. Name two prominent characteristics of Macaulay's style.  
 III. Quote a sentence from him about the Puritans.  
 IV. What does he say about *Bunyan's Pilgrim's Progress*?  
 V. Quote a sentence from *Emerson*.
4. I. Characteristics of Tennyson's poetry?  
 II. Characteristics of George Eliot's Novels?  
 III. What of Prescott's style?  
 IV. How does Pope differ from Bryant?  
 V. Quote a metaphor from Bryant.
5. Write a quotation of from 2 to 6 lines from:
  - I. The Bugle Song.
  - II. Thanatopsis.
  - III. The Deserted Village.
  - IV. Merchant of Venice.
  - V. Death of the Flowers.

---

### JUNIOR CLASSES.

#### PART I—Parsing, Sentence Analysis and Word Analysis.

##### Fifty Credits.

1. Parsing—Cathcart's Literary Reader.
  - I. Page 83, fourth line; parse *whatever*.
  - II. Page 83, tenth line; parse *can be had*.
  - III. Page 83, fifteenth line; parse *fired*.
  - IV. Page 83, first line; parse *in*.
  - V. Page 89, tenth line; parse *be*.
2. Parsing—The Ocean.
  - I. Page 107, second line; *unknelled*.
  - II. Page 107, last line of second stanza; *lay*.
  - III. Page 107, fifth line of third stanza; *tremble*.
  - IV. Page 107, fifth line of third stanza; *title*.
  - V. Page 107, fourth line of fourth stanza; *tyrant*.
3. Sentence Analysis.

I. Page 178. State the number of simple, of complex, and of compound sentences in the first three paragraphs.

II. Analyze the first sentence.

III. Page 210. Dispose of the second line.

IV. Third stanza, third line; parse *to act*.

V. Last stanza, what kind of a sentence and why?

4. Sentence Analysis.

I. (Page 277.) (*a*) How many simple sentences in the first three paragraphs? (*b*) Compound sentences?

II. Second paragraph, third sentence. Analyze it.

5. Word Analysis—Analyze and define the following:

I. Propose.

II. Attracting.

III. Expiration.

IV. Immortal.

V. Doctrine.

VI. Predict.

VII. Education.

VIII. Transit.

IX. Influence.

X. Analysis.

PART II.

1. I. Dickens.—Born? Died? Youth?

II. Characteristics of Dickens's Writings?

III. Characteristics of Burns's Poems?

IV. Quote a stanza from Burns.

V. Write a brief sketch of Daniel Webster.

2. I. What of Irving's style?

II. Name five of his works.

III. Quote and punctuate a stanza from Byron's *Ocean*.

IV. Hawthorne's rank. Why?

V. Name 5 of Holmes's Poems.

3. I. Write a 10 line sketch of Longfellow.

II. Why do you like his poems?

III. Quote 10 lines from the *Ship of State*.

IV. Quote two stanzas from the *Psalm of Life*.

V. Which do you prefer. Longfellow's Poems, or Whittier's?

Why?

4. I. Write a 10 line sketch of Whittier.

II. Characteristics of his poetry.

III. Quote 10 lines from Whittier.

- IV. Write a 10 line sketch of Mrs. Stowe.
- V. Name 5 of Parton's Biographies.
- 5. I. Short sketch of Bret Harte.
- II. Quote a stanza from him.
- III. Write a 10 line sketch of Walter Scott.
- IV. Quote 10 lines from him.
- V. Quote the best sentiment that you know of in the whole range of authors.

## COMPOSITION AND RHETORIC.

### SENIOR AND MIDDLE CLASSES.

Ten Questions, Ten Credits Each.

1. (a) Define *style*.
- (b) Upon what does the excellence of a sentence depend?
2. (a) Give five examples of misused words.
- (b) Give three examples of stilted expressions.
3. (a) Give three rules for Unity.
- (b) Give three rules for Clearness.
- (c) Give three rules for Strength.
4. Define, and give an example of each: 1. Simile. 2. Metaphor.
3. Metonymy. 4. Synecdoche.
5. (a) In regard to style, what are three questions to be asked?
- (b) In regard to language, what questions?
6. Give five rules for the use of the comma, and an example to illustrate each.
7. (a) Give three directions for using the colon, with examples.
- (b) Three for the period.
8. (a) State the general divisions, or heads, used in writing a theme.
- (b) Define—1. Allegory. 2. Climax. 3. Epigram. 4. Hyperbole.
5. Rhyme.
9. 1. "When Sunday the fourth of November dawned, the cliffs of the Isle of Wight were full in view of the Dutch armament. 2. That day was the anniversary both of William's birth and of his marriage. 3. Sail was slackened during part of the morning; and divine service was performed on board of the ships. 4. In the afternoon and through the night the fleet



held on its course. 5. Torbay was the place where the Prince intended to land. 6. But the morning of Monday the fifth of November was hazy. 7. The pilot of the Brill could not discern the sea-marks, and carried the fleet too far to the west. 8. The danger was great. 9. To return in the face of the wind was impossible. 10. Plymouth was the next port. 11. But at Plymouth a garrison had been posted under the command of the Earl of Bath. 12. The landing might be opposed; and a check might produce serious consequences. 13. There could be little doubt, moreover, that by this time the royal fleet had got out of the Thames, and was hastening full sail down the channel. 14. Russell saw the whole extent of the peril, and exclaimed to Burnet, 'You may go to prayers, doctor. 15. All is over.' 16. At that moment the wind changed, a soft breeze sprang up from the south, the mist dispersed, the sun shone forth, and, under the mild light of an autumnal moon, the fleet turned back, passed round the lofty cape of Berry Head, and rode safe in the harbor of Torbay."

10. QUESTIONS—1. What is the most noticeable feature in the structure of this paragraph? What effect does it produce?
2. To what kind of composition does it belong?
  3. Are there any examples of abrupt transition?
  4. What relation do sentences from (9) to (13) bear to (8)?
  5. Estimate the proportion of classical and Saxon words.
  6. Is any word or phrase inappropriate?
  7. What does the greater portion of the paragraph lead the reader to expect? Where does the change come, and with what effect?
  8. Can the style be characterized as *harmonious*?

---

## COMPOSITION.

---

### JUNIOR CLASSES.

Ten Questions, Ten Credits Each.

1. State directions in letter writing about the following points:
  - I. Date and place.
  - II. Form of address.
  - III. Subscription.
2. State five directions about the choice of words.

3. State three directions about sentence making.
4. Define each, and illustrate by an example:
  - I. Circumlocution.
  - II. Euphemism.
  - III. Synonyms.
5. Rule for the position of emphatic words.
6. State five methods for securing variety of expression, and illustrate each by an example.
7. Expound the following into complex and then into compound sentences:
  1. The wind being fair, the ship put to sea.
  2. The sun having risen, we resumed our march.
  3. Egypt is a fertile country, watered by the Nile.
8. Rule for the use of the *semicolon* in compound sentences; of the *comma*.
9. Name five conjunctions of each type:
  1. And-type.
  2. But-type.
  3. Hence-type.
10. In complex sentences when do you use a comma?
  1. With adverbial clauses?
  2. With adjective clauses?
  3. When do you not use a comma with clauses?

---

## WORD ANALYSIS.

---

### SENIOR CLASSES.

1. Name and define five Teutonic, or Anglo-Saxon, prefixes, and five suffixes.
2. Name the five verb-suffixes, and give and define a word to illustrate each.
3. Name and define five Romanic noun suffixes, and give and define a word to illustrate each.
4. Name and define five adjective suffixes, and give a word to illustrate each.
5. Give and define five Greek prefixes, and give and define a word to illustrate each.

6. Give the literal or root meaning and the secondary or synonymous signification of: 1. Antipathy. 2. Belie. 3. Foretell. 4. Unkind. 5. Darling.

7. Analyze according to models—1. Circumvent. 2. Profusion. 3. Incision. 4. Enact. 5. Auditor.

8. Give and define five words from each root—1. Credere. 2. Capere. 3. Crescere. 4. Dare. 5. Facere.

9. Ditto—1. Gradi. 2. Pungere. 3. Levare. 4. Mutare. 5. Ponere.

10. Analyze—1. Telegraph. 2. Chronology. 3. Conchology. 4. Pyrometer. 5. Photograph.

### MIDDLE CLASSES.

Ten Questions, Five Credits Each.

1. Give the prefix, root and suffix, with the meaning of each; the root signification and the definition of—1. Discretion. 2. Concurrence. 3. Irrepressible. 4. Recreation. 5. Exclusive.

2. Give the present infinitive and supine of the root verb, and the signification of the root verb of—1. Confusion. 2. Translation. 3. Conjunction. 4. Dismissal. 5. Compulsion.

3. Give five derivatives from each of the following—1. Noscere. 2. Petire. 3. Vincere. 4. Ferre. 5. Ligare.

4. Derivation of—1. Attic. 2. Milliner. 3. Dollar. 4. Hessian. 5. Sybarite.

5. Name five Anglo-Saxon suffixes; define each. Give a word to illustrate each, and define the word.

6. Name all the verb suffixes, and give a word to illustrate each.

7. Name ten Greek prefixes, and give and define a word to illustrate each.

8. Discriminate the following pairs of synonyms—1. Indolent—lazy. 2. Character—reputation. 3. Death—decease.

9. Difference between—1. Ask—inquire. 2. Compare—contrast. 3. Era—epoch. 4. News—tidings. 5. Pride—vanity.

10. 1. Truth—veracity. 2. Knowledge—science. 3. Character—reputation. 4. Humor—wit. 5. Indolent—lazy.

## SENIOR, MIDDLE AND JUNIOR CLASSES.

## Fifty Credits.


## 1. Latin Roots—Nouns.

- I. Analyze and define *egregious*.
- II. Write five derivations of *centum*.
- III. Write five derivations of *finis*.
- IV. Write five derivations of *corpus*.
- V. Analyze and define.

## 2. Latin Adjectives.

- I. Analyze and define *equivocate*.
- II. Analyze and define *malediction*.
- III. Give five derivations of *liber*.
- IV. Give five derivations of *magnus*.
- V. Give five derivations of *fortis*.

## 3. Definitions—Blankbook work:

 Give exact definitions, not synonyms.

- I. Solecism.
- II. Idiom.
- III. Eulogium.
- IV. Philippic.
- V. Anglo-Saxon.

## 4. Definitions:

- I. Poetry.
- II. Science.
- III. Synonyms.
- IV. Demagogue.
- V. Caucus.

## 5. Definitions:


- I. "The bar."
- II. Mythology.
- III. Money.
- IV. Sociology.
- V. The Vedas.

## ZOOLOGY.

---

### SENIORS.

Ten Questions, Ten Credits Each.

 *Select either a or b.*

1. (a) State three modes of respiration in water-breathers; two in air-breathers.

(b) Name the sub-kingdoms, commencing with the lowest, and define each.

2. (a) What is the test of the presence of a liver? Why is the pancreas so large in birds?

(b) Name and classify some insects that are destructive to the vine; to wheat; to clothes; to vegetation.

3. State five facts about the skeleton of the sea-urchin; the lobster.

4. (a) Name and classify the silkworm, the honey-bee, the house-fly and the grass-hopper.

(b) Structure, position and functions of the cerebrum and cerebellum.

5. (a) State the important changes in the development of a hen's egg.

(b) State the orders of birds.

6. (a) State the differences between the toes and teeth of the horse and the ox; claws and tongue of the cat and dog.

(b) Mention the changes in the digestive apparatus from the lowest sub-kingdom to the highest.

7. What animals undergo metamorphosis? State the development of a frog.

8. (a) State the points of resemblance and of difference between oysters and clams.

(b) In what classes do we first find: 1. A nervous system. 2. A mouth. 3. An eye. 4. A heart. 5. Lungs.

9. Give the classes of vertebrates and their characteristic differences. Draw a fish.

10. How does the brain of man differ from that of apes? What points of superiority has man over apes, monkeys and gorillas?

### EXTRA.

1. Draw a bird. (1 extra credit, if well drawn, otherwise nothing.)

2. Draw a butterfly. (Ditto.)

3. Draw a fish. (Ditto.)

## MIDDLE CLASSES.

Ten Questions, Ten Credits Each.

1. State the differences between a plant and an animal; their resemblances.
2. Name the chief tissues of animals, and describe one of them.
3. Define protoplasm, zoology, protozoa.
4. Name an animal from each of the five sub-kingdoms, and tell how it takes its food.
5. Name a mammal without lips; a vertebrate without teeth; a radiate with teeth.
6. Describe two animals that you have examined during the year.
7. State the main facts in the process of nutrition in the highest type of vertebrates.
8. State five facts about corals; five about sponges.
9. Name the classes of the Echinodermata. Describe the sea urchin.
10. (a) Uses of sea slugs.  
 (b) Name an animal with a quadrangular mouth.  
 (c) Which rhizopods are most interesting?  
 (d) What microscopic animals secrete shells?  
 (e) Benefits of the study of Zoology.

## EXTRAS.

No credits unless well drawn.

1. Draw a star-fish (*Goniaster reticulatus*).
2. Draw the proboscis of a butterfly.

## PHYSICS.

## SENIOR CLASSES.

I.—LECTURE WORK. (Ten Questions, Five Credits Each.)

1. Name three forces, and give two examples of the power of each.
2. Why do feathers fall more slowly than stones? Which will reach the ground first, a pound ball or a ten-pound ball, if they are let fall from a tower at the same time?
3. (a) If a pendulum is sixteen times as long as a second's pendulum, how long will it take to make one vibration?



(b) If we could take a pendulum to a height of four thousand miles, would it vibrate faster? Why?

4. If a horse, by the aid of pulleys and a capstan, move a house one foot for every three hundred feet he travels around the capstan, how many horses could move the house without the aid of any mechanical power?

5. One hundred cubic inches of air weigh about 31 grains. What is the buoyant force of air upon a balloon which occupies one thousand cubic feet?

6. A bottle which holds just two pounds of water weighs one pound more when full of an acid. What is the specific gravity of the acid?

7. Name the successive changes effected by heat acting upon water at 32 degrees Fahrenheit.

8. What is the distance of a wall which returns an echo in 20 seconds when the air is at 32 degrees Fahrenheit?

9. Draw a diagram to show the position of a reflected image in a plane mirror. Show that a mirror three feet long will give a full length image of a man six feet high.

10. Name three essential facts of the Morse telegraphic instrument.

## II.—TEXT-BOOK WORK. (Five Questions, Five Credits Each.)

1. What is a Leyden Jar, and what is it used for?
2. State the five effects of statical electricity.
3. State the four effects of heat.
4. State the three sources of heat.
5. Define specific heat; latent heat.

## MIDDLE CLASSES.

### I.—LECTURE WORK. (Ten Questions, Five Credits Each.)

1. Why is it impossible to cook potatoes in water in an open vessel on a high mountain? On what sea shore is boiling water the hottest?

2. A man took a gallon of gas from the seashore to the top of a mountain, where its volume was two gallons. How high would mercury stand in a barometer on the mountain? Explain.

3. The tone C is produced by 128 vibrations in a second. How many vibrations will give an octave higher? An octave lower?

4. Draw a diagram showing how the image of an object appears in a plane mirror.

5. How far off is a wall which returns an echo in three seconds?

6. A ton of cork, as weighed in a valley, will weigh more than a ton on a lofty mountain. Why?

7. In what two ways may a piece of soft iron be made a temporary magnet?

8. Name an instrument which has a permanent magnet for an essential part; one in which an electro-magnet is used.

9. What is a telephone? Name two laws of electricity applied in its use.

10. Describe an experiment which illustrates the use of a lightning-rod.

## II.—TEXT-BOOK WORK. (Five Questions, Five Credits each.)

1. Define specific gravity. Explain how the specific gravity of gold is found.

2. How much weight does a submerged solid lose? A floating solid?

3. What resemblance between glasses and liquids? What difference?

4. What is the velocity of sound? Light? Electricity?

5. Define latent heat; specific heat. What are the sources of heat?

## JUNIOR CLASSES.

Ten Questions, Ten Credits Each.

### I.—LECTURE WORK.

1. State which of the following are compounds, mixtures or elements:  
1. Gold. 2. Yeast powder. 3. Salt. 4. Borax. 5. Copper.

2. What force acts when—1. Lead melts. 2. Gas burns. 3. Oil rises through water. 4. Water rises in a sponge. 5. Sugar dissolves.

3. State the different ways in which the strength of a body may be tried, and give illustrations of each.

4. What would help prevent oil from running down the sides of the vessel from which it is poured, and why?

5. Name—1. Two hard metals. 2. Two kinds of tough wood. 3. One kind of very heavy wood. 4. Two kinds of brittle wood. 5. Two kinds of soft, light wood.

### II.—TEXT-BOOK WORK.

6. If a body is kept in stable equilibrium by one supporting point, where must that point be?

7. How far will a body fall in six seconds?

8. What is the length of a pendulum that vibrates seconds?

9. A lever five feet long moves upon a fulcrum two feet from the end where a weight of 555 pounds is suspended. How many pounds at the other end will balance the weight?

10. State five advantages derived from the use of machines.

## PHYSICAL GEOGRAPHY.

## SENIOR CLASS.

## One Hundred Credits.

1. (a) Give six proofs of the earth's rotundity. (6 credits.)  
(b) State the mean diameter of the earth. (2 credits.)  
(c) What is the difference between the equatorial and the polar diameter? (2 credits.)
2. (a) Why is Europe more favorably situated than any of the other grand divisions for commerce and navigation, and for the development of its internal resources?  
(b) How do Africa and North America compare with Europe in comparative length of coast line?
3. (a) In each continent where is the line or axis of greatest elevation placed? Illustrate.  
(b) Name and locate the culminating points of the old world and the new world.
4. (a) Where and what are the following:
  1. The Tundras.
  2. The Steppes.
  3. The Landes.
  4. The Pampas.
  5. The Selvas.
  6. The Polders.
  7. The Llanos.
  8. The Prairies. (8 credits.)  
(b) What are dunes? (2 credits.)
5. What can you say as to the uses of plains? of mountains?
6. (a) Give a general account of the causes of ocean currents?
7. State the course of the Gulf Stream, its speed and its effect on the coast of Europe. What is the difference between its temperature and the surrounding waters off Newfoundland in winter?
8. What are glaciers? moraines? How and where do icebergs originate?
9. State the extent of one great rainless region of the world.
10. (a) What are monsoons? cyclones? typhoons? the simoom? the pampero?  
(b) Why is it colder at the top than at the bottom of a mountain.

## MIDDLE CLASSES.

## Fifty Credits.

1. (a) Give six proofs of the earth's rotundity.  
 (b) State the mean diameter of the earth.  
 (c) What is the difference between the equatorial and the polar diameter?
2. Why is Europe more favorably situated than any of the other grand divisions for commerce and navigation, and for the development of its internal resources?
3. How do Africa and North America compare with Europe in comparative length of coast line?
4. (a) In each continent where is the line or axis of greatest elevation placed? Illustrate.  
 (b) Name and locate the culminating points of the old world and the new world.
5. Where and what are the following:
 

1. The Tundras.	2. Steppes.
3. The Landes.	4. The Pampas.
5. The Selvas.	6. The Polders.
7. The Llanos.	8. The Prairies.
6. What can you say as to the uses of plains? of mountains?
7. Give a general account of the causes of ocean currents.
8. State the course of the Gulf Stream, its speed, and its effect on the coast of Europe. What is the difference between its temperature and the surrounding waters off Newfoundland in winter?
9. I. Comparative size of the Old World and the New.  
 II. Direction of Mountain Ranges in each.  
 III. Indigenous products of each world.  
 IV. Native domestic animals of each.  
 V. Population of each.
10. I. Highest mountain peak and height of the peak.  
 (a) in Asia. (b) in South America.  
 II. Five chief cities of the globe with the population of each.  
 III. Physical divisions of the United States.  
 IV. Five chief cities and population of each.  
 V. Five states having the largest population in order and rank.

## GEOGRAPHY.

---

### JUNIOR CLASSES.

#### PART I—CALIFORNIA.

Fifty Credits--Five Questions, Ten Credits Each.

1. I. Area.  
II. Population.  
III. Chief Exports.  
IV. Chief Imports.  
V. Five largest cities in order of population.
2. I. Five chief rivers.  
II. Two highest mountain peaks with the height of each.  
III. Five most important valleys.  
IV. Physical features.  
V. Climate.
3. I. Population of San Francisco?  
II. Where is San Diego? Yreka?  
III. Four chief lakes?  
IV. Manufactures of San Francisco?  
V. Population of Sacramento?
4. I. Agricultural resources.  
II. Mining.  
III. Commerce.  
IV. Stock-raising.  
V. Scenery.
5. I. Draw an outline map of California, six inches in length, and locate ten cities, three rivers, two mountain chains, two mountain peaks, and three bays.

#### PART II.

Blank Book Outlines—Fifty Credits.

1. Our Country—
  - I. Physical divisions.
  - II. Five chief rivers.
  - III. Five chief seaport cities.
  - IV. Five largest in population.
  - V. Three States having the largest population.

## 2. Rank of States—

- I. Three in area.
- II. Three in manufactures.
- III. Three in cotton.
- IV. Three in lumbering.
- V. Three in gold.

## 3. The World—

- I. Contrast of continents in shape.
- II. Comparative size.
- III. Direction of mountain ranges.
- IV. Where are the highest mountain peaks?
- V. Indigenous products of each world.  
*The Old and the New World.*

## 4. I. Native domestic animals of each.

- II. Population of each.
- III. Name the great cities in each between 40° and 50° N. L.
- IV. Highest mountain peak in each with the height in feet.
- V. Five chief ocean currents.

5. I. Five chief seas (*a*) of the Old World; (*b*) of the New.

- II. Population of Asia; of Africa.
- III. Population of the United States; of Russia.
- IV. Five chief cities of the globe with population of each.
- V. Three leading countries of the world in manufactures ;

iron; coal.

## BOTANY.

### SENIOR CLASS.

Lecture Work.—Five Questions, Five Credits Each.

1. Draw diagrams showing the embryo of buckwheat, and beans.
2. Which has the larger plumule, the bean or a melon seed? Why?
3. Name the largest tree in the world; the largest species of pine; the largest fir; two remarkable California plants.
4. Name five orders, and give one characteristic distinguishing each from the other four?
5. Name ten garden plants, and give the orders to which they belong.



## Text-Book Work.—Five Questions, Five Credits Each.

1. Compare exogens with endogens, giving the differences between their stems, leaves, and seeds.
2. Name five seeds, and tell whether they have albumen or not, and whether their cotyledons are leaf-like or thick.
3. Define the terms, *decumbent*, *trailing*, *prostrate*, as applied to stems.
4. Describe five kinds of inflorescence.
5. Compare the branching of stems with the branching of roots.

*Extra Questions.*—Five Questions, One Credit Each.

1. How is soil formed? What makes it black? Why deeper in a valley?
2. Describe the seeds of the erodium.
3. Give five ways in which seeds become widely distributed.
4. Give two characteristics of the California flora.
5. How would you distinguish a pine from a fir? a fir from a cedar?

## MIDDLE CLASSES.

## Lecture Work.—Five Questions, Five Credits Each.

1. Draw a diagram showing the embryo of a datura seed.
2. What can you say of the cotyledons and the plumule of a albuminous seed?
3. Name five California trees, and five parasitic plants.
4. Give the number of sepals, petals and stamens of a violet; of a fuchsia; of a lily; of each of two other flowers.
5. Name two orders, and give five characteristics of each.

## Text-Book Work—Five Questions, Five Credits Each.

1. Name and describe the essential parts of a perfect flower.
2. What is an annual plant? a biennial? a perennial? an epiphyte? a parasite?
3. What is a tuber? a root-stock? a bulb? a sucker? a stolon?
4. Name five kinds of flower bunches (inflorescence).
5. Define the terms pinnate, palmate, whorled, radicle, stipulate, as applied to leaves.

*Extra Questions.*—Five Questions, One Credit Each.

1. Describe the stamens of the lupine.
2. Describe the stipules of erodium.
3. Make three drawings illustrating the germination of a lentil.

4. What part of the germinating buckwheat first appears above ground?
  5. Draw a diagram showing the shape of the cotyledon leaves of the mustard.
- 

### JUNIOR CLASSES.

#### I. Lecture Work.--Five Questions, Five Credits Each.

1. Name five flowers, and give the number of petals and stamens in each.
2. Draw a diagram showing the parts of a lentil seed, and describe it.
3. Name three exogenous seeds which have albumen, and two which have no albumen.
4. Name five plants belonging to the *Cruciferae*, and five belonging to the *Solanaceae*.
5. Name five orders, and one characteristic plant of each.

#### II. Text-Book Work.—Five Questions, Five Credits Each.

1. Name the parts of a plant; of a seed.
2. Name, on a diagram, the parts of a pistil; of a stamen.
3. Name three annuals; one biennial; one perennial.
4. What is an herb? a shrub? a tree?
5. Compare a spike with a raceme; an umbel with a corymb.

#### *Extra Questions.*—Five Questions, One Credit Each.

1. Give the botanical name of five plants which you have not before named on this paper.
  2. Describe any plant, telling one thing about its stem, two about its leaves, and seven about its flowers.
  3. Draw a lupine leaf and a rose leaf.
  4. Show, by diagrams, the position of the embryo in an oat and in a grain of corn.
  5. Give five characteristics of the Boorage family.
- 

## GRAMMAR.

---

### JUNIOR, MIDDLE AND SENIOR CLASSES.

#### Fifty Credits.

1. Define and give a sentence to illustrate—
  - I. An intransitive verb.
  - II. A relative pronoun.

- III. An adjective pronoun.
- IV. A common noun.
- V. A proper noun.
- 2. Define and write an illustration—
  - I. A simple sentence.
  - II. A complex sentence.
- III. A compound sentence.
- IV. The subject.
- V. The predicate.
- 3. I. Make a list of the suffixes of inflection.
- II. Directions for the use of *shall* and *will*. Examples to illustrate.
- 4. I. State the rule of syntax applied to this sentence: "Every boy and every girl in school studies arithmetic."
- II. Rule for the order of personal pronouns in the same construction.
- 5. I. Where should you put the adverb "only"? Illustrate by a sentence.
- II. "I, who am here," etc. Why *am* instead of *is*?
- 6. I. What is the use of idiomatic "there" and "it"? Illustrate in two sentences.
- II. Analyze the sentence: "You or I must go."
- 7. I. Give five condensed directions from your Blank Book, about sentence making.
- II. Five rules for the comma.
- 8. Correct the following, if you think they are inelegant or incorrect, and give the reason:
  - I. We went in the garden.
  - II. Who do you think did it?
  - III. He is the same man whom we saw.
  - IV. You had better go.
  - V. I had rather not go.
- 9. "Beneath the rugged elms, that yew-tree's shade  
Where heaves the turf in many a mouldering heap,  
Each in his narrow cell forever laid.  
The rude forefathers of the hamlet sleep."
  - I. Parse *beneath*.
  - II. Parse *laid*.
  - III. Parse *each*.
  - IV. What is the second line?
  - V. Parse *turf*.
- 10. I. Synopsis of the verb *to write*, in the indicative mood, third person, singular number, passive voice.
- II. Synopsis of the verb *to read*, indicative mood, first person singular, progressive negative form.

## SPELLING AND DEFINING.

---

### SENIOR CLASSES.

#### I. Spelling and Defining, Twenty Credits.

In the words of Greek derivation, give and define the prefixes, suffixes and roots; then the literal or root meaning of the word; and, lastly, the synonymous or secondary signification.

- |               |               |
|---------------|---------------|
| 1. Graphite,  | 6. Pantheism, |
| 2. Cataract,  | 7. Polygon,   |
| 3. Eccentric, | 8. Synonym,   |
| 4. Epigram,   | 9. Telephone, |
| 5. Homonym,   | 10. Cynosure. |

#### II. Spelling.—Eighty Credits.

- |                 |                  |                     |
|-----------------|------------------|---------------------|
| 1. Diphthong.   | 28. Zoophyte.    | 55. Restaurant.     |
| 2. Morphine.    | 29. Apocryphal.  | 56. Re veil'le.     |
| 3. Triphthong.  | 30. Anachronism. | 57. Littera'teur.   |
| 4. Trapeze.     | 31. Harangue.    | 58. Portman'teau.   |
| 5. Cataclysm.   | 32. Lorgnette.   | 59. Recherche.      |
| 6. Catechism.   | 33. Melee.       | 60. Protégé.        |
| 7. Aneurism.    | 34. Outré.       | 61. Benefited.      |
| 8. Chlorophyl.  | 35. Soiree.      | 62. Crystallize.    |
| 9. Ellipsis.    | 36. Vignette.    | 63. Panicky.        |
| 10. Euphemism.  | 37. Connoisseur. | 64. Trafficking.    |
| 11. Hemorrhage. | 38. Employé.     | 65. Humbuggery.     |
| 12. Labyrinth.  | 39. Etagere.     | 66. Phosphorus.     |
| 13. Mnemonics.  | 40. Fricassee.   | 67. Desiccation.    |
| 14. Neophyte.   | 41. Matinee.     | 68. Guttural.       |
| 15. Ostracise.  | 42. Guarantee.   | 69. Saccharine.     |
| 16. Paroxysm.   | 43. Mignonette.  | 70. Hypocrisy.      |
| 17. Porphyry.   | 44. Naiveté.     | 71. Inflammation.   |
| 18. Pseudonym.  | 45. Nonchalance. | 72. Eleemosynary.   |
| 19. Pneumatics. | 46. Resumé.      | 73. Phantasmagoria. |
| 20. Pyrites.    | 47. Retinue.     | 74. Lugubrious.     |
| 21. Symmetry.   | 48. Revenue.     | 75. Erysipelas.     |
| 22. Syringa.    | 49. Coterie.     | 76. Resuscitate.    |
| 23. Sclerotic.  | 50. Etiquette.   | 77. Ostensible.     |
| 24. Tragacanth. | 51. Sustenance.  | 78. Exhilarate.     |
| 25. Troglodyte. | 52. Parvenu.     | 79. Emanation.      |
| 26. Thesaurus.  | 53. Reservoir.   | 80. Imbroglia.      |
| 27. Trichina.   | 54. Rendezvous.  |                     |

## MIDDLE CLASSES.

## Spelling—80 Credits.

1. Plaintiff.	28. Pharmacy.	55. Vaccinate.
2. Sortie.	29. Pleurisy.	56. Vacillate.
3. Truffle.	30. Papyrus.	57. Tyrannize.
4. Bizarre.	31. Synonym.	58. Separate.
5. Croquet.	32. Symphony.	59. Scintillate.
6. Chenille.	33. Syllogism.	60. Phaeton.
7. Pirouette.	34. Strabismus.	61. Crystalline.
8. Repartee.	35. Telephone.	62. Aqueduct.
9. Etiquette.	36. Phonograph.	63. Alcohol.
10. Rendez-vous.	37. Anonymous.	64. Impugn.
11. Litterateur.	38. Apostasy.	65. Lachrymose.
12. Styptic.	39. Asphyxia.	66. Resumé.
13. Anodyne.	40. Anathema.	67. Complaisance.
14. Bronchia.	41. Scarlatina.	68. Parvenu.
15. Chlorophyl.	42. Convalescence.	69. Apocryphal.
16. Chrysalis.	43. Precocity.	70. Labyrinth.
17. Cynicism.	44. Verbosity.	71. Logarithm.
18. Diaphragm.	45. Trisyllable.	72. Lymphatic.
19. Ellipsis.	46. Resuscitate.	73. Licorice.
20. Glycerine.	47. Obstreperous.	74. Pharynx.
21. Hemorrhage.	48. Exonerate.	75. Rhubarb.
22. Hygiene.	49. Accommodate.	76. Mnemonics.
23. Liturgy.	50. Caterpillar.	77. Proselyte.
24. Miasma.	51. Supersede.	78. Prophecy.
25. Ophicleide.	52. Remittance.	79. Pneumonia.
26. Paradigm.	53. Proboscis.	80. Rhapsody.
27. Paroxysm.	54. Mosquito.	

## II.—Defining. Twenty Credits.

## Twenty Words, One Credit Each.

1. Acme.	8. Diphthong.	15. Tropic.
2. Arctic.	9. Logic.	16. Thermal.
3. Archives.	10. Nomad.	17. Theist.
4. Cynic.	11. Parsley.	18. Psendo.
5. Chronic.	12. Physics.	19. Oyster.
6. Comma.	13. Planet.	20. Stigma.
7. Cosmos.	14. Sarcasm.	

## METHODS OF TEACHING.

---

### NORMAL CLASS.

1. I. Classification of the intellectual faculties. (2 credits.)  
II. Subdivisions of each main class. (8 credits.)
  2. I. Leading objects of the recitation.  
II. State three methods of recitation.  
III. State five things that should be required of pupils.
  3. I. State the *minimum* of a common school education.  
II. State the most important principle in education to be borne in mind by the teacher.
  4. I. State ten short and specific directions for teaching reading.  
II. Five directions in respect to teaching writing.
  5. I. State five directions for spelling.  
II. State five directions for history.
  6. State ten terse and comprehensive directions and principles in regard to teaching Arithmetic.
  7. Ditto, Language and Grammar.
  8. Ditto, Geography.
  9. State five main principles to be observed in School Government.  
Ditto, Manners and Morals.
  10. I. Quote five educational axioms, principles, or aphorisms, and name the author.  
II. State what you have read about teaching.
- 

### DRAWING.

---

### JUNIOR CLASSES.

1. Draw from memory a table in angular perspective, with a box upon it in parallel perspective. To be finished in one hour and thirty minutes. Fine work not so important as correct perspective. *Do not erase any lines.* (10 credits.)
2. Draw a design of any kind (applied) either in pencil, ink or India ink. This specimen must be drawn in school, and finished in three weeks from its commencement. Size of paper according to direction. (15 credits.)



## MIDDLE AND SENIOR CLASSES.

1. Draw, shade, and cast the shadow of a cube, cone, cylinder or sphere, or two or more solids together. Finish in black and white crayon, upon tinted paper, at least seven or eight inches in height.

Scholars who prefer to do so may draw and shade objects, such as vases, etc., or may make designs (applied) either in pencil, ink, India ink or color.

These specimens must be drawn in school, and be finished in three weeks from their commencement. Size of the paper according to direction. (25 credits.)

## QUESTIONS USED IN THE ANNUAL EXAMINATION OF THE BOYS' HIGH SCHOOL, 1878.

### ENGLISH LITERATURE.

#### JUNIOR CLASS.

##### "MARMION."

1. Of what nationality was Sir Walter Scott? At about what date did he flourish? (3) Name two other poems and four novels written by him. (2) What was a leading motive for his giving up the writing of poetry for that of prose? (2) What is a canto? (6) What is the subject of each canto in "Marmion"?

2. Write out a single quotation of about ten successive lines, or two of about five each. (1 credit.)

3. Give as good an account of the poem as you can in ten lines. (1 credit.)

4. Define or otherwise explain the italicised words—

I. He scattered *angels* round.

Here is a holy *Palmer* come.

Long afterward did Scotland know

*Fell Edward* was her deadliest foe.

Two *pursuivants* whom *tabards* deck,

With silver *scutcheons* round their neck.

A huge romantic *tome*,

Imprinted at the *antique dome*

Of *Caxton* or *De Werd*.

- III. 14. Not there his *relics* (reliques) might repose.
15. When, with his Norman *bouryer* band,  
He came to waste *Northumberland*.
15. A *cresset*, in an iron chain,  
With damp and darkness seemed to strive.
22. Who enters at such *grisly* door.
- V. 2. But burnished were their corslets bright,  
Their brigantines and *gorgets* light.
5. And wild and *garish* semblance made  
The chequer'd *trews*, and belted plaid.
8. His trusty blade, *Toledo right*,  
Descended from a *baldric bright*.
- VI. 2. The *Bloody Heart* was in the field,  
And in the *chief*, three mullets stood.
12. *Saint Michael* and St. Andrew aid,  
I dub thee Knight.

### ENGLISH MIDDLE.

#### "TEMPEST."

- I. 1. At about what date was the play probably written?
2. In the reign of what King of England?
3. How much time is occupied by the play?
4. From what passage in the play do you infer this?
5. What plausible theory as to the origin of the play?
- II. Define, or otherwise explain, the italicised words in the following passages:
1. Down with the topmast! *yare!* lower!
2. Well demanded *wench*.
3. An it had not fallen *flat long*.
4. For then thou wast not *out* three years old.
5. My heart bleeds to think o' th' *teen*, that I have turned you to.
6. Dost crown my *bosky* acres.
7. The *queen o' th' sky*, whose *watery arch* and messenger am I.
8. *Single I'll resolve you*. (10 credits.)
- III. What is the best rendering of "Bring her to try with main-course?" (2 credits.)
- IV. "There be some *sports* are *painful*, and their *labor* *delight* in them sets off." Syntax of italicised words. (4 credits.)
- V. "And crown what I profess with kind event if I speak true! if hollowly, invert." Explain. (2 credits.)

VI. "Which now we find each puttenout of five for one will bring us good warrant of." Explain. (4 credits.)

VII. "On the bat's back I do fly after summer merrily." Explain. (4 credits.)

VIII. "Being once perfected, how to grant suits, how to deny them, who to advance, who to trash for overtopping." Explain, and state the syntactical relation of the two words "who." (4 credits.)

IX. Give three quotations from the play. (5 credits.)

X. Define, or otherwise explain, the italicised words in the following passages:

1. "Could make a *chough* of as deep *chat*."

2. "If 'twere a *kibe* 'twould put me to my *slipper*." (3 credits.)

3. "Will you *troll* the *catch* you taught me but *while-ere*." (3 credits.)

4. "Sometimes, like apes that *now* and chatter." (1 credit.)

5. "You are three men of sin whom destiny—that hath to *instrument* this lower world." (2 credits.)

7. Bring a *corollary*, rather than want a spirit." (2 credits.)

XI. Give as full a description as you can of the two characters that you think most important. (10 credits.)

Name four other characters that you think next in importance. (4 credits.)

#### ENGLISH SENIOR CLASS.

1. Mention two of Pope's best known poems. (2 credits.)

What is the principal characteristic of his verse? (8 credits.)

2. Who was the most illustrious prose writer in the first half of the eighteenth century? (2 credits.)

What other celebrated writer of essays was associated with him? (2 credits.)

Mention a noted fictitious character, whose life, in town and country, formed the subject of some of the most delightful papers of these writers. (4 credits.)

Name two periodicals to which they contributed. (2 credits.)

3. Name the greatest and most characteristic prose work of Dean Swift. (2 credits.)

What is the object of this work and its general plan? (2 credits.)

What kind of a man was Swift? (2 credits.)

What is the character of his prose? (2 credits.)

How would you contrast his language and choice of words with those of Dr. Johnson?

4. Who wrote "The Decline and Fall of the Roman Empire?" "The Deserted Village?" "The Cotter's Saturday Night?" "The Heart of Midlothian?" "The Lay of the Last Minstrel?" "Childe Harold?" "The Rime of the Ancient Mariner?" "The Sentimental Journey?" "Rasselas?" "Vanity Fair?" (10 credits.)

5. Name four of the novels of Sir Walter Scott. (2 credits.)

Mention four of the best known of his fictitious characters. (2 credits.)

Into what two classes may his works of fiction be divided? (2 credits.)

In what country are their scenes mostly laid? (2 credits.)

What biographical work did he write?

6. Give an account of Byron's personal character. (2 credits.)

In what parts of Europe was his life passed after his separation from his wife? (2 credits.)

Where and at what age did he die? (2 credits.)

Name four of his finest poems. (4 credits.)

7. Name two noted works of each of the following authors: Moore, Wordsworth, Thackeray, Dickens, Bulwer.

8. In what branch of literature did each of the following American authors employ their talents: Prescott, Sparks, Hawthorne, Bryant, Cooper? Name one work by each.

9. State some of the prominent characteristics of Irving's writings.

10. Name the authors of—"Thanatopsis," "Marco Bozzaris," "The Culpit Fay," "The Star Spangled Banner," "Hail Columbia."

---

## ENGLISH HISTORY.

---

### ENGLISH JUNIOR CLASS.

1. The three Roman Emperors connected with building the great wall. (3 credits.)

2. Present name of the countries from which the Northmen came to England? (3 credits.)

3. Condense into about ten lines the story of William the Conqueror. (8 credits.)

4. Condense into about ten lines the story of Thomas à Becket. (8 credits.)

5. Name three provisions of Magna Charta. Its year? Who was then King? (5 credits.)

6. Who was King or Queen of England in—(a) 900? (b) 1066? (c) 1190? (d) 1510? (e) 1600? (f) 1700? (g) 1800? (5 credits.)
7. Of all the land battles in which English soldiers fought, name six of the most important previous to 1625. (6 credits.)
8. The story of Cromwell in about ten lines. (6 credits.)
9. Name five of the battles between Charles I and the people. (5 credits.)
10. Name two important battles of the Wars of the Roses. (2 credits.)
11. Whose reign was especially remarkable for its distinguished men? (2 credits.)
12. In whose reign did Columbus discover America? The Puritans settle New England? (2 credits.)
13. Name four great generals or great fighters, and give an account of one of them. (4 credits.)
14. Name three great Admirals. (3 credits.)
15. Name two discoverers, explorers or navigators. (2 credits.)
16. Mention two noted literary men, and give an account of one of them—what he wrote. (2 credits.)
17. Name five distinguished women of England, and state for what each was distinguished. (5 credits.)
18. An account of the Gunpowder Plot, in about eight lines. (5 credits.)
19. The Great Armada, similarly. (5 credits.)
20. The story of Joan of Arc. (5 credits.)
21. What was the Commonwealth? Who was its head? Say what you can about it in five lines. (5 credits.)
22. In about eight lines, give an account of the Revolution of 1688. (6 credits.)
23. Who was the highest judge in England in the “Bloody Assize.” (1 credit.)
24. Who was King of England when the American Revolution began? (2 credits.)

---

## COMPOSITION.

---

### JUNIOR CLASSES.

Ten Questions, Ten Credits Each.

1. State directions in letter writing about the following points:
  - I. Date and place.
  - II. Form of address.
  - III. Subscription.

2. State five directions about the choice of words.
3. State three directions about sentence making.
4. Define each, and illustrate by an example:
  - I. Circumlocution.
  - II. Euphemism.
  - III. Synonyms.
5. Rule for the position of emphatic words.
6. State five methods of securing variety of expression, and illustrate each by an example.
7. Expound the following into complex and then into compound sentences:
  - I. The wind being fair, the ship put to sea.
  - II. The sun having risen, we resumed our march.
  - III. Egypt is a fertile country, watered by the Nile.
8. Rule for the use of the *semi-colon* in compound sentences; of the *comma*.
9. Name five conjunctions of each type:
  - I. And-type.
  - II. But-type.
  - III. Hence-type.
10. In complex sentences where do you use a comma:
  - I. With adverbial clauses?
  - II. With adjective clauses?
  - III. When do you not use a comma with clauses?
11. Name six peculiarities of poetical construction, and illustrate each by a sentence.
12. Combine these statements into a complex sentence:  
 Hubert relied upon the King's word. He was old enough to know better. He came out of Merton Abbey. He journeyed away to see his wife. She was a Scottish Princess. She was then at St. Edmondsbury.

---

## POLITICAL ECONOMY.

---

### ENGLISH SENIOR CLASS.

Time, Two Hours.

1. Define—1. Wealth. 2. Capital. 3. Rent. 4. Credit. 5. What is the exact service that labor renders to production?
2. What is meant by—1. Unproductive labor? 2. Productive consumption? 3. Unproductive consumption?



3. What is the difference between circulating and fixed capital?
4. What is meant by a double standard of value? Is there a double standard in this country? Give a reason for your answer.
5. Into what three classes may commodities be divided when considered in relation to their value?
6. Upon what does the cost of labor depend? Illustrate.
7. How are wages regulated? Illustrate.

What are Adam Smith's five causes that produce difference of wages in different employments?

8. Show, as well as you can, that workmen are not ultimately benefited by a rise in wages that causes their employers' profits to sink below the ordinary rate.

9. State Adam Smith's four canons of taxation. Briefly illustrate each.

Give reasons why it would seem that taxes should not be levied on raw materials.

#### ENGLISH MIDDLE CLASS.

1. What nations belong to the Aryan race, and how is their identity proved? (5 credits.)
2. Name the Oriental nations of antiquity, and, as briefly as you can, characterize each. (10 credits.)
3. Contrast Oriental and European history. (5 credits.)
4. What did the Greeks call their country, and what did it embrace? (5 credits.)
5. What were the physical features of Greece, and what marked influence had they on the Greeks? (5 credits.)
6. Who was Sparta's great legislator, and what was the chief object of his legislation? (5 credits.)
7. Who was Athens' great legislator, and what was the chief object of his legislation? (5 credits.)
8. Name and give a brief sketch of the most brilliant period of Athenian history. (10 credits.)
9. Name two noted men (not previously named) in Grecian history, and state for what each was most noted.  
Name two important battles, the commanders at the battle and the wars during which they were fought. (10 credits.)
10. Into what three political periods may the history of Rome be divided? Bound each by dates. (5 credits.)

11. What causes led to the first secession of the Plebs, and what was the result of the secession? (5 credits.)

12. Give an outline of Cæsar's career. (10 credits.)

13. Name three of Rome's greatest generals, three of her greatest writers, and four of the most important battles of different wars. State in what campaign each general distinguished himself, the leading works of the writers you mention, and the wars to which the battles you mention belong. (10 credits.)

14. Give a brief account of Constantine; Attila. (10 credits.)

---

## ROMAN HISTORY.

---

### CLASSICAL MIDDLE CLASS.

1. Bound Italy. Locate Rome, *Cannæ*, *Numantia*, Carthage, *Agri-culum*, *Zama*, *Actium*, *Cyzicus*. Mention, as briefly as you can, some event in the history of Rome connected with the italicised words.

2. What were the three sovereign assemblies at early Rome, and of what class or classes did each consist?

3. For what were the Decemvirs appointed, with what powers, and what was the result of their work?

4. What led to the First Punic War?

Give a brief account of the first period of the Second Punic War (Hannibal's first campaign.)

5. What led to the First Civil War? Give a brief account of this period.

6. For what are the Gracchi, Cato the Censor, Regulus, Pompey, L. Æmilius Paulus most noted?

7. What were the principal duties of the Consuls, Dictators, Censors?

8. Give an outline of Cæsar's career.

---

### ENGLISH SENIOR CLASS.

1. To what period of the world's history is the term "Dark Ages" applied? (3 credits.)

Name two men noted for original thought and great learning during that period. (3 credits.)

2. Give an account of the Hanseatic League. (6 credits.)
3. What was the characteristic art of the Middle Ages? (3 credits.)  
How did the words of Latin origin come to be introduced into the English language? (3 credits.)
4. What were the causes of the prosperity and glory of Venice? (3 credits.)  
Where did the family of the Medici rise to great influence? (3 credits.)
5. Name—
  1. The government under which the sea route to India was opened up. (1 credit.)
  2. The date of the capture of Constantinople by the Turks. (1 credit.)
  3. The navigator who first circumnavigated the globe, in 1519-1521. (1 credit.)
  4. The three men to whom the honor of having invented printing is due. (3 credits.)
6. During the struggle for liberty in Holland, who was the King of Spain? (2 credits.)  
Who was the most distinguished leader of the Netherlands? (2 credits.)  
Name the most noted and most cruel of the Spanish Generals. (2 credits.)
7. Give a brief statement of the date, the objects and the result of the Spanish Armada. (6 credits.)
8. What were the characteristics of the period of Louis XIV in France? (6 credits.)
9. What was the effect of the French Revolution upon the nations of Europe? What are its results to-day? (6 credits.)
10. What do you understand by the Zoll Verein? (2 credits.)  
Give an account of Napoleon's Russian campaign. (4 credits.)

## GRECIAN HISTORY.

---

### CLASSICAL JUNIOR CLASS.

1. With what date does the credible history of Greece begin?  
Why is that which is called Grecian history previous to this time uncertain?

2. What qualities were the heroes of the Heroic Age supposed to have?  
What were the two most memorable events of the Heroic Age?
3. What were the most important ties that bound the Greeks together?
4. Who was Sparta's great legislator, and what did his laws make of the Spartans?
5. In Grecian history, what does the word "tyrant" mean?
6. What was meant by ostracism?
7. Give as good an account of Themistocles, Aristides, Alcibiades and Socrates as you can in about five lines each.
8. Name four principal battles of the Persian Wars, and who were the leaders on the opposite sides in each.
9. What was the Confederacy of Delos, and what led to it?
10. How long did the Peloponesian War last?  
What was the general character of the war?  
By what battle was it ended?
11. What was the most brilliant period of Grecian history?
12. To what men did Thebes owe her supremacy?
13. Who delivered the orations called the Philipppics, and what was their occasion?
14. What was the extent of the empire of Alexander?
15. Tell what you know about Arbela, Leuctra.

---

## NATURAL PHILOSOPHY.

---

### ENGLISH MIDDLE CLASS.

1. Define—Gravity, weight, center of gravity, state of equilibrium, unstable equilibrium.
2. Give a brief description of the hydrostatic press. State the principle upon which it acts, and draw a diagram illustrating its action.
3. (a) How much is a body buoyed up in water?  
(b) How do we find the specific gravity of a solid body. Construct and solve a problem illustrating the rule.
4. How much is the atmospheric pressure to the square inch? Explain how this is ascertained.
5. (a) Give Marriotte's Law.  
(b) What is the practical use of a manometer?
6. How does the resistance a moving body meets increase compared with the velocity? State briefly why this is true.

7. (a) What is the velocity of sound in water?  
 (b) To what are echoes due?  
 (c) Upon what does the velocity of sound in any medium depend?  
 (d) How does its intensity vary, compared with the distance of the sounding body?  
 (e) By what is sound propagated?
8. (a) What is the object of the instrument called the Siren?  
 (b) Explain the difference between a musical note and its octave.  
 (c) Why is it that the same note sounded upon two different instruments—say a violin and a flute—sounds so differently to the ear?
9. (a) What is the accepted theory regarding the origin and propagation of light?  
 (b) How did Römer determine the velocity of light?  
 (c) What is mirage, and what is its cause?  
 (d) What is an achromatic prism?  
 (e) When are two colors complementary?
10. (a) Define—Diathermanous, calorescence.  
 (b) What is meant by specific heat?  
 (c) Give the principle upon which ice is manufactured. (3 credits.)  
 (d) Name an important apparent exception to the law that heat expands and cold contracts. (3 credits.)

---

## PHYSIOLOGY.

---

### ENGLISH SENIOR CLASS.

1. Define and locate—1. The medulla oblongata. 2. The malleus. 3. The aorta. 4. The arachnoid membrane. 5. The epiglottis. 6. The trachea. 7. The pharynx. 8. The cerebrum. 9. The labyrinth. 10. The patella.

2. Give a brief account of the circulation of the blood, and state what circumstances may retard and what assist the circulation.

3. Trace the digestive process from the time the food is put into the mouth till the eliminated nourishment is found in the blood.

4. What processes take place during sleep?

5. Name the varieties of gland, and state the use of each.

6. Give the approximate proportion of carbonic acid in ordinary air and in expired air.

Why does not the carbonic acid expired by the inhabitants of a city settle down upon and suffocate them? Give two reasons.

7. State the distinctive functions of the spinal cord, the cerebrum and the cerebellum.

8. Give two important hygienic directions in regard to each of the following: 1. The skin. 2. The heart. 3. The eye. 4. The muscles. 5. The brain.

## CHEMISTRY.

---

### ENGLISH SENIOR CLASS.

1. Define analysis. (1 credit.) Tell how water may be analyzed, (two methods ; 4 credits).

Define synthesis. (1 credit.) Illustrate. (2 credits.) Define distillation. (2 credits.)

2. Explain the chemical changes which take place in the burning of a match. Name the products of the combustion, giving their chemical symbols, and tell what becomes of them. (10 credits.)

3. What is meant by the *combining weight* of an element ? (2 credits.)

What is the "atomic hypothesis" ? (2 credits.) Give the combining weight of Fe. Hg. O. S. P. (5 credits.)

4. What is ozone believed to be ? Tell how it is prepared, where it is observed in nature, and state five of its prominent characteristics. (10 credits.)

5. How does phosphorus occur in nature ? (2 credits.)

Whence do chemists and manufacturers obtain the phosphorus of commerce ? (2 credits.)

In what is it soluble ? (2 credits.)

State the characteristics of red phosphorus. (3 credits.)

How may  $P_2O_5$  be prepared ? (1 credit.)

6. Name three distinct allotropic modifications of carbon. (2 credits.)

How could you demonstrate that the diamond is crystallized carbon ? (2 credits.)

What part does carbon play in the economy of animal life ? (2 credits.)

What are the characteristics of carbon protoxide ? (2 credits.)

What is  $CH_4$  and how is it obtained ? (2 credits.)

7. Describe briefly the manufacture of illuminating gas, and state the different processes by which the impurities are removed. (10 credits.)



8. What chemical changes are the basis of the art of photography? (3 credits.)  
 What is collodion? cellulose? sucrose? dextrose? lactose? dextrine, levulose? (7 credits.)  
*Alcohol*—state its characteristics, method of preparation, uses in the arts.
9. Give the distinguishing properties of the element sodium. (5 credits.)  
 State the formula of borax, the form in which it occurs in nature, and its use in the arts. (5 credits.)
10. Name two important ores of each of the following metals: Ag., Cu., Fe., Pb., Zn.  
 How is Ag. freed from metallic lead? (5 credits.)

## ALGEBRA.

---

### JUNIOR AND SENIOR.

1. In what other way may  $a - 2$  be written? (2 credits.) Prove that your way of writing it is correct. (4 credits.) What is the reciprocal of  $a - \frac{2}{3}$ ? of  $\frac{1}{a - \frac{2}{3}}$ ? Tell me why you think your answer is correct. (4 credits.)
2. Divide  $(x^3 - 3x^2 + 3x - 1)(x^2 - 2x + 1)(x - 1)$  by  $x^4 - 4x^3 + 6x^2 - 4x + 1$ . (10 credits.)
3. Divide  $a^2 - b^2 - c^2 + 2bc$  by  $\frac{a + b - c}{a + b + c}$  (10 credits.)
4. Simplify by the use of the G. C. D.  $\frac{3x^2 + 12x + 9}{x^5 + 5x^3 + 6}$  (10 credits.) Give the G. C. D. as one of your answers.
5. Simplify by first finding L. C. M. of denominators. Give the L. C. M. as one of your answers.  $\frac{2x}{x^4 - x^2 + 1} - \frac{1}{x^2 - x + 1} + \frac{1}{x^2 + x + 1}$
6. Solve  $\frac{3x-1}{2x-1} - \frac{4x-z}{3x-z} = \frac{1}{6}$

7. Solve and state the method you use—
- $$\begin{array}{r} x \quad y \\ - + - = c \\ a \quad b \\ x \quad y \\ - + - = 0 \\ b \quad a \end{array}$$

8. Three persons can together complete a piece of work in 60 days, and it is found that the first does three-fourths of what the second does, and the second four-fifths of what the third does; in what time could each one alone complete the work?

9. (For the Seniors) Demonstrate the rule for the G. C. D.

10. Show that  $a^0 = 1$ ; that  $a^m \times a^n = a^{m+n}$ ; that  $a-(b+c) = a-b-c$ ; that  $a^m \div a^n = a^{m-n}$

### JUNIOR CLASS.

1. (1) When is a factor of a quant. the same as a root of that q.? (2) What is a power? (3) What does a positive integral exponent signify? (4) A positive fractional? (5) What is a coefficient? (10 credits.)

2. Remove brackets and simplify:  $2a - [2a - \{2a - (2a - 2a -) \} ]$ . (2 credits.)

3. Divide  $a^3 + b^3 + c^3 - 3abc$  by  $a + b + c$ . (5 credits.)

4. Divide  $x^3 - (a + b + c)x^2 + (ab + ac + bc)x - abc$  by  $x - c$ . (5 credits.)

5. Perform the operations indicated by applying the proper formula, and after each example write the formula you use:

(1)  $\left[ \frac{3x^2}{2y} + \frac{2y}{3x^2} \right]^2 = ?$  (2)  $(x^4 - x^2y^2 + y^4)(x^2 + y^2) = ?$  (5 credits.)

(3) Find the value in its simplest form of

$$\frac{b}{(a-b)(a-c)} + \frac{a}{(b-a)(b-c)}. \quad (5 \text{ credits.})$$

6. Perform the operations indicated, by the use of factors:

$$\begin{aligned} (1) & \frac{x^6 - y^6}{x^4 + 2x^2y^2 + y^4} \times \frac{x^2 + y^2}{x^2 - xy + y^2} \times \frac{x + y}{x^3 - y^3} \\ (2) & \frac{x^2 - (a+b)x + ab}{x^2 - (a+c)x + ac} \div \frac{x^2 - b^2}{x^2 - c^2} \quad (5 \text{ credits.}) \end{aligned}$$

7. (1) What is an equation of the first degree? Give an example. (2) What is the solution of an equation? (3) On what axioms do the several transformations of equations depend? (4) What are simultaneous equations? (5) What is elimination? (10 credits.)

8. Solve the equations:

$$(1) \quad \frac{x-a}{a-b} - \frac{x+a}{a+b} = \frac{2ax}{a^2-b^2} \quad (3 \text{ credits.})$$

$$(2) \quad \frac{3+x}{3-x} - \frac{2+x}{2-x} - \frac{1+x}{1-x} = 1. \quad (5 \text{ credits.})$$

$$\frac{1}{-} + \frac{2}{-} - \frac{3}{-} = 1.$$

$$(3) \quad \frac{x}{5} + \frac{y}{4} + \frac{z}{6} = 24. \quad (5 \text{ credits.})$$

$$\frac{x}{7} - \frac{y}{8} + \frac{z}{9} = 14.$$

$$\frac{x}{-} + \frac{y}{-} + \frac{z}{-} = 14.$$

$$9. \quad (1) \quad (5322249)^{\frac{1}{2}} = ?$$

$$(2) \quad (4x^2y^2 + 12x^2y + 9x^2 - 30xy^2 - 20xy^3 + 25y^4)^{\frac{1}{2}} = ? \quad (10 \text{ credits.})$$

$$(3) \quad \frac{1}{(\sqrt{2} + \sqrt{3})(2\sqrt{6} - 5)(\sqrt{3} + \sqrt{2})}$$

Rationalize the denominator and reduce to the simplest form.

## GEOMETRY.

BOOKS V, VI, VII.

### ENGLISH SENIOR CLASS.

1. Define (a) Arc, segment, sector, a regular polygon, similar polygons.

(b) How can you show that the circumference of a circle may be circumscribed about a regular polygon?

2. (a) Define—Perimeter and apothegm. (2 credits.)

(b) How may a circle be regarded in relation to polygons? (4 credits.)

(c) What is the relation of the circumscribed square to the inscribed square? (4 credits.)

3. Show briefly, from the equations

$$1. \quad p' = \sqrt{p \times P} \quad 2. \quad P' = \frac{2p \times P}{p + p'}$$

that the area of a circle whose radius is 1 is 3.141592, in which the unit of measure is the square of the radius.

4. (a) In what proportion are the areas of different circles to each other?

(b) Show that in a circle half the product of the circumference and radius is equal to its area.

5. Show that the intersection of two planes is a straight line.

6. What is a parallelopipedon? a right parallelopipedon? a polyedron? a pyramid? a prism?

7. (a) The convex surface of a right prism = ?

(b) What of a right pyramid?

(c) Define right pyramid.

(d) The volume of a prism?

(e) That of a pyramid?

8. Any triangular prism may be divided into three triangular pyramids, etc.

## LATIN.

### Latin Grammar—Syntax.

#### CLASSICAL SENIOR.

##### I. Twenty Credits.

What constructions are used in Latin to express purpose? Translate the following into Latin, using all possible forms to express purpose: "Ambassadors were sent to Cæsar to say that the town had been taken."

##### II. Twenty Credits.

What are the forms of conditional clauses in Latin, and the meaning of each form?

##### III. Ten Credits.

How are the various relations of place "in which," "to which," and "from which" expressed in Latin?

## IV. Ten Credits.

Mention all the uses of the accusative that you can recall.

## V. Ten Credits.

Mention the various uses of the ablative.

## VI. Ten Credits.

What are the uses of the Gerund and Gerundive in the various cases?

## VII. Ten Credits.

Explain the use of the moods in Indirect Disc.

## VIII. Ten Credits.

Give the rules of agreement for

- (a) The appositive. (b) The adjective.  
(c) The rel. pron. (d) The finite verb.

## Latin Composition—Etymology.

### CLASSICAL SENIOR.

## I. Twenty Credits.

(N. B. Words italicised are emphatic.)

Translate into Latin: "The Belgians, influenced by the love of *glory*, and relying upon their valor, waged *many* wars with the Germans." Decline words for—"love," "valor," "wars"—principal parts of all the verbs. Rule for case of words for "glory" and "valor."

## II. Ten Credits.

Translate: "Opponents must be refuted."

## III. Twenty Credits.

Translate: "They say that Catiline would not have gone from the city, unless he had feared the consul." Decline words for "*city*," and "consul." Parts of the verbs, and rule for the mood of each.

## IV. Ten Credits.

Translate: "The friendship of the Roman people was often a detriment, not a defense, to their allies."

## V. Ten Credits.

Decline the pronouns *ego*, *tu*, *hic*, *quis*.

## VI. Ten Credits.

Inflect the following verb-forms: (a) imp. subj. of *sum*, (b) plup. ind. act. of *audio*, (c) imp. subj. pass. of *rego*, (d) imperative pres. pass. of *moneo*, (e) perf. subj. pass. of *amo*.

## VII. Twenty Credits.

Inflect throughout *volo*, *fit*, and *fero* in the irregular tenses, with a synopsis in the regular tenses.

---

 Latin.
 

---

## CLASSICAL JUNIOR.

1. Translate: *Moribus suis Orgetorigem ex vinculis causam dicere coëgerunt: damnatum pœnam sequi oportebat ut igni cremaretur.*

2. Principal parts of all the verbs?

3. Decline *moribus*, *pœnam*, *igni*.

4. Rule for case of *moribus*, *causam*, *pœnam*, *igni*. (When a rule covers more than one point, indicate which one applies.)

5. Translate: At the death of Cæsar grief<sup>1</sup> and terror prevailed<sup>2</sup> throughout the city.

<sup>1</sup>*luctus*, <sup>2</sup>*exsisto*.

6. Rule for case of words for *death*, *Cæsar*, *grief*, *city*.

7. Decline words for *death*, *grief*, *terror*.

8. Translate: *Ubi jam se ad eam rem paratos esse arbitrati sunt, oppida sua omnia, numero ad duodecim, vicos ad quadringentos reliqua privata ædificia incendunt; frumentum omne, præterquam quod secum portaturi erant, comburunt: ut, domum reditionis spe sublata paratiores ad omnia pericula subeunda essent; trium mensium molita cibaria sibi quemque domo efferi jubent.*

9. Principal parts of all the verbs.

10. Rule for mode of *incendunt*, *essent*, *efferi*, *jubent*.

11. Decline *se*, *eam*, *domum*, *spe*.

12. How are adjectives compared in Latin? Compare *bonus*, *primus*, *similis*, *supremus*, *acer*.

13. Translate: "Cato, said his friends, was clear<sup>1</sup> of every human fault."

<sup>1</sup>*vacuus*.

14. Give the rule for case of word for *fault*.

15. Decline words for *friends*, *clear*.



16. Inflect the verb *for* was, in pres. ind.; plup. ind. perf. subj. imperf. subj.

17. Translate: *Invitat Canius postridie familiares suos. Venit ipse mature, Scalmum nullum videt.*

18. Decline *ipse*, *nullum*, compare *mature*, and explain the manner of comparing adverbs in Latin.

## Latin Composition and Grammar.

### MIDDLE CLASS.

1. Translate: My uncle and myself, having returned to Misenum, passed an anxious and doubtful night. Give rules for case of words for *uncle*, *Misenum*, doubtful. Decline words for *myself*, night.

2. Translate: Demosthenes, the Athenian orator, being banished from his country on a false charge of having received money from Harpalus, was an exile at Megara. Rule for case of words for *orator*, *country*, *money*, *Megara*. Principal parts of all the verbs. Inflect the verb *was-in-exile* in plup. sub. act.; fut. perf. ind. act.; imperf. ind. act; imperat. act.

3. Translate: This was the third and last attempt [on the part] of the Tarquiniî: for by this victory the Latins were completely humbled and Tarquinius Superbus could apply to no other state for assistance. Give a list of the demonst. pron. with some account of their meaning and use.

4. Translate: She engaged for [her] sons the most eminent Greek teachers, and from the pains she took with their education they surpassed all the Roman youths of their age. Rules for case of *sons*, *teachers*. What constructions are used in English where the relative pronoun is used in Latin?

5. "We bring you here war and peace," said the Roman Ambassadors in the Senate of the Carthagenians, "which pleases you best?" What are the interrogative pronouns in Latin, and their difference in use and meaning?

6. Horace did not read his poetry to any one except friends, and then under compulsion, not everywhere nor before everybody [indiscriminately]. What indefinite pronouns mean "any" in the Latin, and what is their difference in use and meaning?

## Latin Translation.

PROSE.

## CLASSICAL SENIOR CLASS.

Mercatoribus est ad eos aditus magis eo, ut, quæ bello ceperint, quibus vendant, habeant, quam quo ullam rem ad se importari desiderent: quin etiam jumentis, quibus maxime Galha delectatur, quæque impenso parant pretio, Germani importatis non utuntur, sed quæ sunt apud eos nata, parva atque deformia, hæc quotidiana exercitatione summi ut sint laboris, efficiunt. Equestribus præliis sæpe ex equis desiliunt ac pedibus præliantur: equosque eodem remanere vestigio assuefaciunt: ad quos se celeriter, cum usus est, recipiunt. [Cæsar, B. G. iv., 2.]

Quis nostrum tam *animo* agrestis ac duro fuit, ut Roscii morte nuper non commoveretur? Qui cum esset senex mortuus, tamen propter excellentem artem ac venustatem videbatur omnino mori non debuisse. Ergo ille corporis motu tantum amorem sibi conciliarat a nobis omnibus: nos *animorum* incredibiles motus celeritatemque ingeniorum negligemus? Quoties ego hunc Archium vidi, iudices—utar enim vestra *benignitate*, quoniam me in hoc novo genere decendi tam diligenter attenditis—quoties ego *hunc* vidi, cum litteram scripsisset nullam, magnum numerum optimorum versuum de eis ipsis rebus quæ tum agerentur, dicere ex tempore!

[Cic. pro Arch. viii.]

## SENIOR CLASSICAL.

POETRY.

Nec minor in terris, Xanthum Simoentaque testor,  
 Æneæ mihi cura tui. Cum Troia Achilles  
 Exanimata sequens impingeret agmina muris,  
 Milia multa daret leto, generentque repleti  
 Amnes, nec reperire viam atque evolvere posset  
 In mare se Xanthus, Pelidæ tunc ego forti  
 Congressum Ænean nec dis nec viribus æquis  
 Nube cava rapui, cuperem cum vertere ab imo  
 Structa meis manibus perjuræ mœnia Trojæ.

Virg. Æn. V. 803-811.

Scan the first verse, giving rules of quantity for each syllable.

What incident of the Trojan war is alluded to in the passage?

Why is Troy called *perjura*?

Clauserat Hippotades aeterno carcere ventos,  
Admonitorque operum cœlo clarissimus alto  
Lucifer ortus erat. Pennis ligat ille resumptis  
Parte ab utraque pedes, teloque accingitur unco,  
Et liquidum motis talaribus aera findit.  
Gentibus innumeris circumque infraque relictis  
Æthiopum populos Cephæaque conspicit arva.  
Illic inmeritam maternæ pendere linguæ  
Andromedam pœnas injustus jusserat Ammon.

Ovid, Met. IV. 662-670.

Scan the last verse, giving rules of quantity.

## QUARTERLY EXAMINATION OF TEACHERS.

DECEMBER, 1877.

These questions must be held exclusively by the Chairman of the Board of Examiners, who is responsible to the State Board for their use. Any examinee who is found guilty of fraud or deception must be forthwith expelled from the class, and the name of such offender reported to the State Board.

Examine no applicant *who is less than eighteen years of age*. Report to the State Board all names and papers of applicants for a State Certificate as soon as practicable.

Carefully read, and be governed by the regulations of the State Board of Examination, as published in the last edition of the School Law, especially the following declaration, to which every examinee must subscribe:

I now, at the close of this examination, conscientiously declare that, prior to each session, I had no knowledge of the questions proposed, that I have neither given to any one, nor received from any source, explanations or other aid in answering any of them, and that I am not less than eighteen years of age. That the answers to the General Questions are true I also *do so declare*.

## ORDER OF STUDIES IN EXAMINATION.

1. General Questions.....	
2. Orthography.....	100
3. Grammar.....	100
4. Written Arithmetic.....	100
5. Geography.....	50
6. *Reading (with oral exercises).....	50
7. Theory and Practice.....	50
8. Defining (Word Analysis).....	50
9. Mental Arithmetic.....	50
10. *Oral Grammar.....	25
11. History of the United States.....	50
12. Composition.....	50
13. Penmanship.....	25
14. Algebra.....	50
15. Natural Philosophy.....	50
16. Physiology.....	50
17. Natural History.....	50
18. Constitution of United States and California.....	25
19. School Laws of California.....	25
20. Industrial Drawing.....	25
21. Vocal Music.....	25
Total.....	1,000

## 1.

## GENERAL QUESTIONS.

1. State your name, age and birthplace.
2. Where educated.
3. Your experience in teaching.
4. What certificates or diplomas you hold.
5. Are you an applicant for a *State* certificate?

N. B.—The oral examination may be conducted at any time, taking each applicant separately.

Nos. 12 and 13, Composition and Penmanship, are to be determined from the other papers submitted.

---

\* The oral examination may be conducted at any time, taking each applicant separately.

## 2.

## ORTHOGRAPHY.

## One Hundred Credits.

1. What are diacritical marks?

Place the proper marks over the following words: Often, dessert, mercy, finale, allopathy, Colorado. (10 credits.)

2. Spell, correctly, the following words: Ricochet, Elysian, ealiope, Yukon, phrenzy, adze, idyl, criticize, peer, diaphragm, Meiggs, Guernsey, depot, precious, alias, Lynn, gorgeous, orthoepy, monopolize, ache, buttress, peasant, exceed, chaos, contumacious. (50 credits.)

3. Give three ways by which derivatives may be formed.

4. Give two examples of primitive, two of derivative and two of compound words.

5. Give all the ways of spelling the following words:

Oar. (Ore, o'er.)  
 Seer. (Sere, cere.)  
 You. (Yew, ewe.)  
 Site. (Sight, cite.)  
 Fain. (Feign, fane.)

---

## 3.

## GRAMMAR.

## Ten Questions, Ten Credits Each.

1. What is the difference between a relative pronoun and a conjunctive adverb?

2. Why are intransitive verbs not used in the passive voice?

3. When a verb has two subjects, differing in person and number, how are these subjects arranged, and with which should the verb agree?

4. Parse the italicised words in the following sentences: *He felt disposed to go.* *He brought me* some fruit. *We are come too late.* *Would it not be better to remain?* *The problem seemed easy* to solve. *I saw him coming.*

5. How can you change a complex to a simple sentence? Give an example.

6. Compare humble, square, much.

7. Define case as the property of a noun.

8. What is meant by "government" and "agreement."

9. Syllableize convenient, penniary, genins, gnome.

10. Give an example of a sentence, phrase and clause.

## 4

## ARITHMETIC.

Ten Questions, Ten Credits Each.

1. Add  $\frac{1}{3}$  of  $\frac{2}{7}$  of  $28\frac{3\frac{6}{7}}{4\frac{2}{7}}$  to  $3\frac{39\frac{1}{2}}{105}$ .
  2. A merchant bought 240 metres of silk at \$2 per M. and sold it at \$1.95 per yard. Did he gain or lose, and how much?
  3. How many wine gallons will a cistern contain which is  $9\frac{1}{2}$  feet long,  $4\frac{1}{2}$  feet wide and  $5\frac{1}{2}$  feet deep?
  4. Sold lumber on commission at 5 per cent. Invested net proceeds in dry goods at 2 per cent. commission. My whole commission was \$70. What was the value of the lumber and the dry goods?
  5. A dry goods merchant sells cloth for \$168, by which he gains 20 per cent. What must be the advanced price so that he can deduct 5 per cent. and still make the same profit?
  6. A broker invested \$3,000 worth of gold in U. S. 6's, which were worth 102 per cent. in currency. What was his annual income from the investment, gold being at 134 per cent.? And what the rate per cent.?
- What relative quantities of silver  $\frac{3}{4}$  pure,  $\frac{5}{8}$  pure and  $\frac{9}{16}$  pure, will make a mixture  $\frac{7}{8}$  pure? Prove.
- What is the circumference of a circle whose diameter is fifteen rods?
- How much less will it cost to fence 40 acres of land in the form of a square, than in the form of a rectangle of which the breadth is  $\frac{1}{4}$  the length, the price per rod being \$1.40?
- Explain the required method for teaching Arithmetic in the public schools.

## 5.

## GEOGRAPHY.

Ten Questions, Five Credits Each.

1. What is the season of the year at Cape Horn in July?
2. What advantages are derived from ocean currents?
3. Draw an outline map of the locality which is the field of the present war.
4. What are isothermal lines, and do they follow lines of latitude?
5. What rivers and lakes of the Pacific side of the continent have no visible outlet?



6. Name the dairy, lumber and mining counties of California.
  7. Where is the Isle of Man? Prince George's Island?
  8. What are the commercial products of the Farallones?
  9. Name ten of the principal rivers of California.
  10. Name ten of the principal mountains of California.
- 

## 6.

## READING.

Twenty-five Credits.

1. What is meant by a folio, a quarto and an octavo volume. Give proper abbreviation for each.
  2. What are the uses of the apostrophe, hyphen, caret and cedilla. Give examples.
  3. Give analysis and method of teaching "The Hare and the Tortoise," as found in Fourth Reader.
  4. How do you know that your pupils understand what they read?
  5. Why do you hear a reading class read?
- 

## ORAL READING.

Twenty-five Credits.

The examiners should require each candidate to read a few stanzas in poetry, a few paragraphs in prose, and mark the credits, considering three things, viz.: ease and smoothness, distinctness of articulation and expression—also, accent and emphasis.

---

## 7.

## THEORY AND PRACTICE.

Five Questions, Ten Credits Each.

1. Name the characteristics of a good question and answer.
2. What three parties must co-operate to make a good school?
3. State methods and hygienics of ventilation.
4. What records and reports are required from teachers?
5. Give a synopsis of a day's labor in the schoolroom.

## 8.

## DEFINING AND WORD ANALYSIS.

## Fifty Credits.

1. What are synonyms ? Give three examples.
  2. Give ten suffixes, denoting "one who," a person.
  3. Give model of a written exercise that you would require from your class, taking the words add, blind, roast, during, hair.
  4. Define, separate into roots, prefixes and suffixes, the following words : Incorporate, homogeneous, thermometer, immortalize, egregious, quadruped, recrimination, pantheism, inoculate, monochromatic.
  5. What suffixes are used to form diminutives ?
- 

## 9.

## MENTAL ARITHMETIC.

## Fifty Credits.

1. The sum of two fractions is  $\frac{3}{4}$ , and their difference  $\frac{1}{4}$ . What are the fractions ?
  2.  $4\frac{9}{10}$  are how many times  $6\frac{2}{3}$  ?
  3. What is the interest of \$150, for 2 years and 10 months, at 8 per cent ?
  4. A and B hired a horse and buggy for \$25. A used it three weeks, B two weeks. What should each pay ?
  5. How many wine gallons in 1386 cubic inches ?
- 

## 10.

## ORAL GRAMMAR.

## Twenty-Five Credits.

Examiners will ask the following questions, orally, at any time during the examination.

1. State what you think is the best method of giving children elementary notions of the function of different parts of speech.
2. Give, as to a class, rules for writing a letter correctly.

3. State why the common use of such words as "splendid," "magnificent," should be discouraged.

4. Make a "complete statement" of the object of this examination.

5. Explain the use of "set" and "sit," "learnt" and "taught."

## 11.

## HISTORY OF THE UNITED STATES.

## Fifty Credits.

1. What two events led to the settlement of the present boundary line between the United States and Mexico.

2. What state owes its political existence to the religious intolerance of the Puritans? Origin of the name "Puritan?"

3. What section was settled by each of the four nations who made early discoveries in America.

4. State what you know of the history of California and its social condition prior to the gold discovery.

5. Give the names of ten military heroes of the Revolutionary War, and ten leading inventors.

## 14.

## ALGEBRA.

## Fifty Credits.

1. Remove the parentheses from the following expression, and reduce the result:

$$4x - 3y - \frac{1}{2}(2x + 4y) + 3x + [y - 9x - (2y - x) + (x - y)] \frac{1}{3}.$$

2. Find the simplest expression for

$$\frac{5}{2(x+1)} - \left[ \frac{1}{10(x-1)} + \frac{24}{5(2x)} + 3. \right]$$

3. Two pedestrians start from the same point, the first steps twice as far as the second, but the second makes five steps while the first makes but one. At the end of a certain time they are 300 feet apart. Now allowing each of the longer paces to be 3 feet, how far will each have travelled?

4.

$$\text{Given } \left\{ \begin{array}{l} x + \frac{y}{z} = \frac{x}{z} - \frac{y}{a} \\ a + \frac{z}{4a^2} = \frac{a}{z} \\ x + y = \frac{a^2}{y^2} \end{array} \right. \quad \text{To find } x \text{ and } y.$$

5. Divide  $\frac{1}{5} \times \frac{8}{15} - \frac{1}{10} \times \frac{7}{10} + \frac{1}{2} \times \frac{3}{4} - \frac{1}{3} \times \frac{7}{12} - \frac{3}{20} \times \frac{9}{20} + \frac{1}{4} \times \frac{1}{2}$   
by  $\times \frac{1}{4} - \frac{3}{4} \times \frac{1}{5}.$

## 15.

## NATURAL PHILOSOPHY.

## Fifty Credits.

1. There are three apertures in a reservoir of water, 1. 4 and 16 feet below the surface. With what comparative velocity will their streams flow?
  2. What are the only reliable indications afforded by the thermometer, and what does a sudden fall of mercury indicate at the different seasons?
  3. Describe the diving bell, and show how descents are made in it.
  4. What is the velocity of sound, and how do solid, liquid, and æri-form bodies compare as conductors of sound?
  5. About how many cubic inches of steam will be required, to raise ten tons ten feet high? If the steam were condensed, how many cubic inches of water would it make?
- 

## 16.

## PHYSIOLOGY.

## Fifty Credits.

1. In what substances does Albumen exist? Casein? Fibrin? Why is unripe fruit indigestible?
  2. Describe the structure of the stomach, and show how the process of insalivation is carried on.
  3. How are you able to discriminate between an artery and a vein in case of a wound? What does the pulse inform the physician?
  4. Upon what organs does vocal culture depend?
  5. State what you know of the relations of mental activity to health.
- 

## 17.

## NATURAL HISTORY.

## Fifty Credits.

1. Describe the *distinguishing* physical characteristics of man, as one of the mammalia.
2. Give general characteristics of insects and state how their respiration is effected. Give a brief account of plant lice.
3. Give a list of Cetaceans found in the Pacific.
4. Give a list of nut bearing trees found in California.
5. Why are leaves green, and why do they become brown in autumn?

## 18.

## CONSTITUTION OF U. S. AND CALIFORNIA.

Twenty-five Credits.

1. Can an Act of Congress be illegal? Who is to decide?
2. What are some of the ways in which Congress may regulate commerce?
3. Who can administer the oath of office to Government officials?
4. How may the Constitution of California be altered or amended?
5. What are some of the objects of the convention for which the people of this State have just voted?

## 19.

## SCHOOL LAW OF CALIFORNIA.

Twenty-five Credits.

1. What is a School District, and what are its officers?
2. How may a new district be formed?
3. In what ways may a district forfeit an appropriation?
4. State the respective duties of the Board of Examination, and of Education.
5. To what school offices are women eligible?

## 20.

## INDUSTRIAL DRAWING.

Twenty-five Credits.

1. What is meant by the terms "Free Hand," Geometrical, and Mechanical Drawing, and how is each applied?
2. Draw a figure containing all the straight lines, and give an analysis, such as you would require from a class.
3. Dictate, as to a class, the drawing of the Latin Cross.
4. What lines may be parallel?
5. State what instruction you have had in drawing.

## 21.

## MUSIC.

## Twenty-five Credits.

1. Within what compass should school songs be written?
2. Should note singing be taught in our public schools?
3. State what you think of the moral influence of Music in schools, and how you would increase that influence.
4. Give examples of songs calculated to inspire courage, heroism, patience.
5. How much time should be given daily to Music?

## QUARTERLY EXAMINATION OF TEACHERS.

JUNE, 1878.

## ALGEBRA.

## Fifty Credits.

1. Why is the algebraic sum of  $3a+5a+4a-2a-7a$  equal to  $3a$ ? (10 credits.)
2. Remove the parentheses from the following expression and reduce the result. (Give reasons for your operation.) (10 credits.)  
 $4c^3-2c^2+c+1-(3c^3-c^2-c-7)-(c^3-4c^2+2c+8).$
3. What is the greatest common divisor of  
 $16x^2-1$ ,  $x-4x^2$ , and  $1-8x+16x^2$ ? (10 credits.)
4. At the close of an election, the successful candidate had a majority of 1,500 votes. Had a fourth of the votes of the unsuccessful candidate been also given to him, he would have received three times as many as his competitor, wanting three thousand five hundred; how many votes did each receive? (10 credits.)
5. Given  $\begin{cases} x+\sqrt{xy}=a \\ y+\sqrt{xy}=b \end{cases}$  To find  $x$  and  $y$ . (10 credits.)



## NATURAL PHILOSOPHY.

## Fifty Credits.

1. Illustrate by figures the three kinds of levers, and give a familiar example of each. (5 credits.)

2. Define the *centre of gravity*, and show how the centre of gravity of a body may be experimentally determined. (5 credits.)

3. What is conduction of heat? Why are steam chests and steam cylinders often covered with wood? (5 credits.)

4. Illustrate by a diagram the law relating to the intensity of light at different distances. (5 credits.)

5. Describe the *syphon*, and explain briefly the principle on which it acts. (5 credits.)

Water is flowing through a syphon; what would take place if the pressure of the atmosphere were removed and afterwards restored. (1) When the lower end of the syphon is immersed in water. (2) When it is not. (10 credits.)

6. Why is the breath visible at some temperatures, and not at others? (5 credits.)

7. State the differences between the electro-magnet and the magnet, and their resemblances. (10 credits.)

## PHYSIOLOGY.

## Fifty Credits.

1. Describe the different parts of the eye, and state the office of each. Why should sudden transitions of light be avoided? (10 credits.)

2. What are the physiological effects produced by suffocation? How would you proceed in restoring a drowned person? (10 credits.)

3. Describe the situation and uses of the liver, the larynx, and pancreas, and name the different digestive fluids. (10 credits.)

4. Give the construction of the joints. (10 credits.)

5. Explain the different parts of the brain, and give your opinion of the effect of excessive mental exercise in childhood? (10 credits.)

## NATURAL HISTORY.

## Fifty Credits.

1. To what Natural Orders do the following useful plants belong? Alfalfa? Alfalfa or "Pin Grass?" The orange? Cotton plant? Rye? (10 credits.)
  2. Describe a crustacean, and compare the lobster and crab. (10 credits.)
  3. Name the classes of vertebrates. (10 credits.)
  4. Name five kinds of flowerless plants. (10 credits.)
  5. How does the fruit of the cocoanut differ from that of the strawberry and pine apple?
- 

## CONSTITUTION OF U. S. AND CALIFORNIA.

## Twenty-five Credits, Five Credits Each.

1. How do Constitutional Governments differ from others?
  2. In case of death or removal of the President and Vice President of the United States, upon whom would the duties of President devolve?
  3. Who must decide in a controversy between a United States law and a law of the State of California?
  4. What are the duties of Cabinet officers and by whom are they chosen?
  5. Name the departments of our State Government, and the principal officers.
- 

## SCHOOL LAW.

## Twenty-five Credits.

1. What constitutes a legal certificate?
2. What is the penalty for non-conformity to the law prescribing the Text-Books for public schools?
3. In what cases may a teacher appeal to the State Superintendent?
4. Has the teacher a right to abridge, or to change the length of the daily school session?
5. Are the "Rules and Regulations of the State Board of Education" binding, and why?

## INDUSTRIAL DRAWING.

## Twenty-five Credits.

1. Draw some object illustrating perspective.
  2. Make a design for a carpet or oil cloth.
  3. Draw a ground plan for a simple building.
  4. Draw and shade a cube and a cylinder.
  5. How would you encourage original drawing in a school?
- 

## MUSIC.

## Twenty-five Credits.

1. Write three bars in  $\frac{3}{4}$  time, key of C, using eight different kinds of notes.
  2. Write the same, using the corresponding rests in place of notes.
  3. Define the terms allegro, cresstaccato.
  4. What is used to increase the capacity of the scale?
  5. Write two octaves in C major.
- 

## ARITHMETIC.

## One Hundred Credits.

1. (a) Find the G. C. D. of 492, 1044 and 744, and (b) the L. C. M. of 256, 372 and 522. (10 credits.)
2. Demonstrate by analysis (a) that  $\frac{5}{9} \times \frac{4}{7} = \frac{20}{63}$ ; and (b) that  $\frac{3}{7} \div \frac{4}{9} = \frac{27}{28}$ .
3. (a) If  $\frac{5}{9}$  of a farm is worth \$4,500, what is  $\frac{3}{4}$  of it worth? (5 credits.)  
(b) If when wheat is 7s. 6d. per bushel, the baker's loaf will weigh 9 ounces, what ought it to weigh when wheat is 6s. per bushel? (5 credits.)

State the above examples by proportion, and give reasons for each statement.

4. (a) How many yards of surface on the interior of a room 24 feet, 6 inches, by 14 feet high?  
(b) Cubic feet in the same room? (10 credits.)
5. (a) Why is the product of .03 by .002 equal to .0006? (5 credits.)  
(b) What decimal is equal to  $\frac{2}{3}$  of  $8\frac{3}{4}$ ? (5 credits.)

6. Define (1) Interest. (2) Business Discount. (3) Net Proceeds. (4) Commission. (5) Proportion. (10 credits.)
7. (a) Interest on \$500, for 97 days, at  $1\frac{1}{4}$  per cent. a month?  
 (b) Interest on \$350, for 1 year, 7 months, 5 days, at 6 per cent. a year? (10 credits.)
8. (a) Extract the Square Root of 625, and draw a diagram to illustrate the method.  
 (b) Extract the Cube Root of 50.623. (10 credits.)
9. If 6 ranks of wood, each 128 feet long, 3 feet wide and 6 feet high, were piled together in the form of a cube, what would be the height of the pile? (10 credits.)
10. What are the first steps to be taken in assessing a tax? What sum must be assessed to raise a net amount of \$5,674 50, allowing  $2\frac{1}{2}$  per cent. commission on the money collected? (10 credits.)

### ORTHOGRAPHY.

#### One Hundred Credits.

1st. Spell the following: Mohammedanism, guarantee, plaintiff, naïveté, trapeze, coalesce, achieving, correspondence, invidious, celestial, growth, resuscitate, acquittal, complaisance, abridgment, inveigle, Byzantine, Samoa, Hawaii, Orkneys, Jamaica, Nice, miscellaneous, chaparral, folly, indelible, venue, logic, embarrass, corrugate, sanctify, rivaled, reeled, toxic, telephone, pavilion, stenographic, judgment, biennial, possess, gaseous, lily, official, puncture, lamb, fugue, prairie, harass, liquid, Calliope. (Give 50 credits.)

(For the Blackboard.)

2d. Correct the following: Osilate, matras, collum, venu, bumbelbe, crisalys, capshun, latitued, fotograf, slited. (Give 20 credits for the above.)

3d. Punctuate and capitalize the following: The Sink of the humboldt, death valley and the salt lake basin have puzzled Geographers. (20 credits.)

4th. Write five words in each of which one of the following diphthongs is found: oi, oy, ow, ou and an. (10 credits.)

### GRAMMAR.

#### One Hundred Credits, Ten Credits Each.

1. State the mood, tense and voice of the verbs in the following sen-

tences: *I am struck. Do not run. He is reading. Dost thou sleep. He will have been thinking.*

2. Analyze the sentence: "I have heard that the papers report to him to have been killed."

3. Define conjugation. What is a synopsis?

4. Write the possessive case, singular and plural, of *deer, goose, it, lady, man.*

5. Correct the following sentences: "He has mistook his true interest." "I intend to summons him." "He has trod on my toes." "Neither smoking or refreshments are allowed here." "He was obliged to fly the country."

6. "Jeffreys, the *then* judge, was cruel." Parse *then*.

7. Which of the auxiliaries denote *emphasis*? Which denote *possibility*, which *power*, which *necessity*, and which *futurity*?

8. When must nominatives connected by *and*, have a verb in the singular number?

9. When should *one another*, and *each other* be used?

10. What is the difference between *later* and *latter*, *rise* and *raise*?

## HISTORY OF THE UNITED STATES.

### Fifty Credits.

1. Give the date of the first settlement of the Pacific Coast by the Catholic missionaries. By the Americans. Give date of the first meeting of the Legislature. (10 credits.)

2. Name the most important historical events that occurred in the administrations of Presidents Jefferson, Jackson, Monroe and Polk. (10 credits.)

3. What compromise bill was passed in 1850? (5 credits.)

4. Name five prominent naval heroes. (5 credits.)

5. Name the principal Indian tribes or nations known to the Atlantic colonies. (5 credits.)

6. Name the States acquired from Spanish, French and Mexican territory. (5 credits.)

7. Explain the Monroe treaty. (5 credits.)

8. Which of the United States was first settled by Europeans? (5 credits.)

## MENTAL ARITHMETIC.

## Fifty Credits.

1. What is the interest of \$75, for 7 months, at 6 per cent. ?
2. What number is that of which 9 is  $\frac{2}{3}$ ?
3. What is the cost of 7 books, at  $37\frac{1}{2}$ c. each?
4.  $\frac{2}{3}$  is what part of  $\frac{3}{4}$ ?
5. 20 is 5 per cent. of what number?
6. How many yards of carpet, 1 yard wide, will be required to cover a floor 17 feet by  $13\frac{1}{2}$  feet?
7. Seven times a number is 15 more than four times the same number. What is the number?
8. Five times a number minus 14 is 48. What is the number?
9. A merchant sold two carpets: for one he received 25 per cent. more than it cost, and for the other 25 per cent. less than he paid. How much did he gain or lose by the sale of both?
10. Reduce  $\frac{9}{12}$  to a decimal.

## WORD ANALYSIS.

## Fifty Credits.

1. State the difference between a primitive and a derivative word. Give five examples of each. (10 credits.)
2. Define and add both prefixes and suffixes to each of the following words: *construct*, *logic*, *credit*, *sincere*, *revise*, and then give the literal definition. (10 credits.)
3. Form verbs from the words *crown*, *alien*, *fog*, *crime*, *telegram*. (5 credits.)
4. Give five examples in the formation of words from Latin roots, and five from the Anglo-Saxon roots, defining each. (10 credits.)
5. Explain the difference in the meaning of the following words when either a prefix or a suffix is added: *Collection*, *temperate*, *sphere*, *timid*, *life*. (10 credits.)
6. Change the following words into nouns by suffixes, and use them in a sentence: *Reclaim*, *maintain*, *sustain*, *differ*, *separate*. (5 credits.)



## THEORY AND PRACTICE OF TEACHING.

## Fifty Credits.

1. State briefly how you would conduct a class recitation; (*a*) as to position of class; (*b*) management; (*c*) object. (10 credits.)
  2. Give an example of your method of teaching percentage. (5 credits.)
  3. Explain, as to a class, the shortening of days in winter. (5 credits.)
  4. What is the relation of public education to the perpetuity of a free government? (5 credits.)
  5. How would you cultivate truthfulness in your pupils? (5 credits.)
  6. Of what benefit are forms of analysis in Mental Arithmetic? (5 credits.)
  7. Explain how you would teach children of ten years of age to write letters and compositions? (5 credits.)
  8. State the primary objects of a school, and the respective duties of (*a*) teachers, (*b*) pupils and (*c*) parents, in carrying out these objects. (10 credits.)
- 

## GEOGRAPHY.

## Fifty Credits.

1. Describe the origin of icebergs, and give a reason why they are not found in the North Pacific Ocean. (5 credits.)
2. State the analogies in the general form of the two great continents, and compare their mountain and river systems. (5 credits.)
3. Name five cities of the United States in the order of their commercial importance. (5 credits.)
4. Through what waters would a cargo of wheat pass, shipped from Chicago to St. Petersburg? (5 credits.)
5. State the causes of the annual cycle of the seasons. (5 credits.)
6. Specify by name the countries extending around the globe on 36° north latitude, beginning with Japan, and assign causes for the density of population. (5 credits.)
7. To what governments do the following islands belong, viz.: Iceland, Majorca, Malta, the Bahamas, Cuba, St. Helena, Vancouver, Madeira, Catalina Island, Tahiti.

## QUARTERLY EXAMINATION OF TEACHERS.

---

MARCH, 1878.

---

2.

## ORTHOGRAPHY.

One Hundred Credits.

1. Spell, correctly, the following words: Echoes, sphere, molecule, dowager, victuals, eyrie, irony, vehicle, vaunt, furlough, fiord, achromatic, exemplar, zoology, spectroscope, criterion, burlesque, February, chloroform, lease, peony, Sinaloa, threshold, Willamette. (25 credits.)

2. Write the following sentences: Man's genius is developed by success, as, illustrated in machinery. We find his economical appliances realize this apparently paradoxical phenomenon, viz., creating cheap commodities from dear raw materials. (15 credits.)

3. Give ten classes of words that should begin with capitals. (20 credits.)

4. Give five examples of words [spelled alike but pronounced differently; and five spelled differently which have the same pronunciation. (2 credits each.)

5. Explain what is meant by these abbreviations: 1. LL. D. 2. C. O. D. 3. Prox. 4. Supt. 5. A. D. 6. Dr. 7. Ult. 8. Rom. Cath. 9. Vs. 10. Cwt. (10 credits.)

6. Write five words, and place over them the signs which represent their elementary vowel sounds. (4 credits each.)

---

3.

## GRAMMAR.

One Hundred Credits.

1. Why do nouns and pronouns change their forms?

2. Write, first, a simple; second, a compound, and third, a complex sentence.

3. Define, and give an example of an idiom.

4. Name and illustrate four different ways in which the nominative case may be used.
5. What parts of speech may be used as subjects? Give examples.
6. "He returned a friend, who came a foe." Parse "foe."
7. Write sentences in which the relatives who, which, what and that are correctly used.
8. Correct—"I expected to have found him gone."
9. Show, in written examples, the difference between perfect and pluperfect tenses.
10. Write the principal parts of the following verbs: Strike, choose, retrieve.

## 4.

## ARITHMETIC.

## One Hundred Credits.

## I.

What three numbers between thirty and one hundred and forty have twelve for their greatest common divisor and 2,772 for their least common multiple?

## II.

What is the approximate sum of 1 decimal unit of the first order,  $\frac{1}{4}$  of a unit of the second order,  $\frac{1}{2}$  of a unit of the third order,  $\frac{1}{3}$  of a unit of the fourth order,  $\frac{1}{5}$  of a unit of the fifth order,  $\frac{1}{6}$  of a unit of the sixth order?

## III.

What is the continued product of the following numbers:

$$\frac{27}{37\frac{4}{5}}, \frac{87\frac{2}{5}}{98\frac{1}{8}}, \frac{\frac{7}{8}}{2\frac{1}{3}}, \frac{81\frac{5}{11}}{128}$$

## IV.

- (a) Deduce a rule for extracting the square root of numbers.
- (b) Prove that  $\frac{3}{7} \div \frac{2}{5} = \frac{1}{4}^5$ .

## V.

A and B own a farm together. A owns  $\frac{7}{12}$  of it and B the remainder, and the difference between their shares is 15 A. 1 R. 28½ P. How much is B's share?

## VI.

When gold is at a premium of 33 per cent., what will be received in gold from a sale of \$5,000 U. S. 5 20's at 72, allowing commission and interest at  $1\frac{1}{2}$  per cent.?

## VII.

The following note was discounted at  $1\frac{1}{2}$  per cent. a month, July 5, 1877; how long had it to run, and what were the proceeds?

\$9,000.

SACRAMENTO, June 19, 1877.

Two months after date, for value received, I promise to pay to the order of Joseph Strong, nine thousand dollars, at the Capital Bank.

## VIII.

How many feet, board measure, are there in three joists, which are 15 feet long, 5 inches wide and 3 inches thick?

## IX.

In 2 miles 6 furlongs 39 rods and 5 yards, how many kilometres?

## X.

I bought a piece of land 16 ch. long and 15 ch. wide at \$100 an acre, and dividing it into lots of 6 rods by 5 rods, sold them at \$50 each. What was my gain?

## 5.

## GEOGRAPHY.

## Fifty Credits.

1. On which side of the western continent does vegetation extend furthest north? Give reason.
2. What European countries are called the five great powers?
3. Write a brief exercise in local geography, or a study of ——— town, village or district.
4. What maritime advantages would Russia gain by the conquest of Turkey?
5. Compare the leading exports of California with those of any European country.

6.

## READING.

Conducted Orally—Fifty Credits.

7.

## THEORY AND PRACTICE OF TEACHING.

1. Explain, as to a class what is meant by the fraction  $\frac{3}{4}$ .
2. Give an illustration of the inductive method of teaching.
3. Illustrate the methods of notation used in percentage, by words, by a fraction, by a decimal, by use of a sign.
4. What is the duty of teachers at recess, and how would you make the time of recess most pleasant and profitable?
5. Explain the scope and methods of language teaching to primary scholars.

8.

## WORD ANALYSIS.

Fifty Credits.

1. Write the derivatives obtained by adding "ing" to the following words: Censure, unpin, confer, dye, play, die, tolerate, control, journey, defer.
2. Give five words, with their meanings, derived from the root ped, meter, or logy.
3. What is the difference between analysis and synthesis?  
What is antithesis? Give example.
4. What suffixes are used to form nouns?
5. Give the difference in meaning between painting and picture, dumb and mute, fruitful and fertile, expect and hope, courage and fortitude.

9.

## MENTAL ARITHMETIC.

Fifty Credits.

1. 108 is how many times 15?
2. A man is 60 years of age, and 20 per cent. of his age is 25 per cent. of the age of his wife. How old is his wife?

3. When bank stock is quoted at 105, how many shares can be bought for \$840?

4. A number multiplied by 6, divided by 3, multiplied by 8 and divided by 4, equals 96. What is that number?

5. How is the value of a proper fraction affected by adding the same number to both its terms? Illustrate, taking  $\frac{3}{5}$ .

## 11.

## HISTORY OF THE UNITED STATES.

## Fifty Credits.

1. Name the "old thirteen States."

2. Name, in their order, the colonial and other wars in which the inhabitants have been engaged.

3. Name, in their order, the inventions which have influenced the development of the country.

4. Under whose administration was the first treaty with Japan effected?

5. What was Lewis and Clark's expedition?

## 12.

## ALGEBRA.

## Fifty Credits.

1. Find the least common multiple of

$$x^4 + 2x^2 + 1, x^4 - 2x^2 + 1, x^2 + 2x + 1, x^2 - 2x + 1, x + 1, \text{ and } x - 1.$$

$$2. \text{ Given } \left\{ \begin{array}{l} \frac{1}{x} + \frac{1}{y} = 2 \\ \frac{x}{1} + \frac{y}{1} = 3 \\ \frac{x}{1} + \frac{p}{1} = 3 \\ \frac{1}{y} + \frac{1}{p} = 3 \end{array} \right\} \text{ to find } x, y \text{ and } p.$$

$$3. \text{ Simplify } \left[ \frac{x^2 - a^2}{x^2 - d^2} \right] \times \left[ \frac{x^2 - (a+b)x + ab}{x^2 - (a-c)x - ac} \right] \times \left[ \frac{x+b}{x^2 - a - 2} \right]$$

4. A grocer sold 50 pounds tea at an advance of 10 per cent. on cost,



and 30 pounds coffee at an advance of 20 per cent. on cost, and received for the whole \$27 40, gaining \$2 90. What, per pound, was the cost of the tea and coffee?

5. Given  $\begin{cases} (x^2 + y^2)(x - y) = 13 \\ xy(x - y) = 6 \end{cases}$  to find  $x$  and  $y$ .

---

15.

### NATURAL PHILOSOPHY.

Fifty Credits.

1. Make a diagram showing the order of colors in the spectrum.
  2. Define the terms atom and molecule.
  3. Explain what is meant by steam of low pressure and high pressure.
  4. Give three familiar instances of an inclined plane.
  5. Compare the magnet with the electro-magnet, giving three points of difference.
- 

16.

### PHYSIOLOGY.

Fifty Credits.

1. Describe the effect of a common cold upon the lungs, and state how it should be treated.
  2. Describe the process of digestion.
  3. What effect has excessive mental labor on the growth and general health of children?
  4. Describe the structure and functions of the skin, and deduce hygienic rules for maintaining its healthy condition.
  5. Show the effects of compression and confined postures upon the lungs and heart, and explain the uses of the diaphragm.
- 

17.

### NATURAL HISTORY.

Fifty Credits.

1. How does an herb differ from a shrub?
2. Describe the metamorphosis of the silk worm.
3. State what you know of the structure and uses of polys.

4. Compare the modes of growth of palms and pine trees, and state their relative importance to man.
  5. Give a comprehensive definition of an animal.
- 

18.

## CONSTITUTION OF U. S. AND CALIFORNIA.

Twenty-five Credits.

1. How may a foreigner become a citizen?
  2. What is meant by the Writ of Habeas Corpus and in what cases may it be suspended?
  3. Under what limitations is liberty of speech guaranteed by the Constitution of California?
  4. What are the legal boundaries of the State?
  5. When does the fiscal year begin?
- 

19.

## SCHOOL LAW.

Twenty-five Credits.

1. What are the powers of the State Board of Education?
  2. For what may teachers expel pupils?
  3. Who may be admitted to the State Normal School?
  4. Who may receive 1st G. Certificates without examination?
  5. What constitutes a school month?
- 

20.

## MUSIC.

Twenty-five Credits.

1. What beats are accented in  $\frac{4}{4}$  time?
2. How many whole tones and how many semitones constitute a scale?
3. Write out the meaning of each of the following abbreviations: D, C, p, pp, f, ff.
4. Write the scale of E, and mark each note that is sharped.
5. Define a chord.

## 21.

## INDUSTRIAL DRAWING.

## Twenty-five Credits.

1. What relation does Geometry bear to Drawing?
  2. What are constructive lines?
  3. Draw a five pointed star, an ivy leaf, an orange.
  4. Give, as to a class, an idea of what is meant by perspective drawing.
  5. In drawing a line, what two points must be kept in sight?
- 

## GRADUATES OF THE BOYS' HIGH SCHOOL, MAY, 1878.

## ENGLISH DEPARTMENT.

Bernard Bienenfeld,	C. E. Doughty,	Frank J. Frapolli,
John F. Glennon,	George W. Harrold,	Edgar S. Hochstadter,
James H. Humphreys,	Felix Lengfield,	Samuel M. B. Levy,
Alonzo G. McFarland,	Samuel J. Maguire,	Fred. C. Matthews,
Edward D. Oakley,	Edward C. Pease,	Edward S. Purdy.
Henry Ruddock.		

## CLASSICAL DEPARTMENT.

Zenas Upham Dodge,	John J. Dwyer,	Harvey M. Edmonds,
William Henry Fiske,	Thomas J. Flynn,	William H. Griswold,
Henry G. Hanley,	Samuel Louison,	Joseph F. Roberts,
J. D. Sherwood,	Philip Zemansky.	

---

## GRADUATES OF THE GIRLS' HIGH SCHOOL, MAY, 1878.

Abrams, Lillie	Hermann, Adrienne C.	Phelps, Minnie M.
Ashmead, Lillian Jean	Hoffman, Lena	Patton, Libbie H.
Arnold, Ernestine J.	Holladay, Louise	Parker, Mary E.
Booth, Mary Isabelle	Hope, Natalia	Pierson, Mable
Boyd, Jennie A.	Holmes, Florence M.	Poole, Etta Frances
Buekbee, Loena M.	Hall, Jennie	Pownell, Lucy Alice
Barber, Margaret A.	Hayburn, Marguerite	Paddon, Harriet M.
Barbat, Josie E.	Herrick, Mary E.	Randall, Marie L.

Bayless, Stella	Jorey, Agnes L.	Robertson, Elizabeth A.
Bloch, Valence V.	Kittredge, Mary W.	Regensburger, Emma
Chipman, Fannie J.	Kellogg, Minnie D.	Radford, Cassie M.
Clark, Minnie C.	Kalisher, Flora	Randall, Fannie E.
Clifford, Jennie M.	Kessing, Cornelia M.	Regensburger, Lillie P.
Chase, Lalla Rose	Kohn, Julie	Reinstein, Lena A.
Cohn, Rose	Lichtenberg, Fannie	Sylvester, Elizabeth F.
Congdon, Annie Laura	Lhote, Sidonie J.	Schwartz, Minnie
Colby, Alice Eloise	Lowry, Isabel	Shear, Lily Ada
Cove, Emily A.	Levy, Adeline	Soulé, Genevieve
Cullen, Lulu R.	Levy, Rebecca	Street, Ella L.
Cahalin, Gertrude H.	Lilienfield, Emma	Sabin, Minnie E.
Cook, Sadie	Lafin, Mary L.	Smith, Louise M.
Clements, Georgiana A.	Learned, Emily G.	Smith, Mary A.
Collins, Laura M.	Lewis, Rosie F.	Schloss, Minnie
Crowley, Josephine C.	Mayers, Bessie	Scouler, Jane Ralston
Curtis, Johanna F.	Meyerstein, Fredericka	Shaw, Ida E.
Dwyer, Annie M.	McCarthy, Nellie M.	Simon, Tillie B.
Dillon, Mattie	McCann, Margaret E.	Soher, Louise
Dodge, Flora A.	McDevitt, Mary	Sampson, Mary L.
Doud, Agnes M.	McPhillips, Anna E.	Smith, Edith H.
Dean, Emily A.	McGuire, Mary A.	Sonnenberg, Lizzie
Ede, Sarah L.	Martin, Emilie L.	Stincen, Ella G.
Edwards, Charlotte T.	Michelsen, Juliet A.	Stevenson, Mary B.
Enquist, Mia E. C.	Morris, Rose	Swain, Lizzie W.
Ellis, Coe C.	Morse, Hettie H.	Tobin, Isabel
Edmonds, Annie C.	Morris, Louise H.	Taylor, Susie E.
Fernandez, Sarah M.	Meyer, Emma E.	Van Den Bergh, Flora
Ferguson, Florence N.	Masounette, Blanche L.	Vincent, Lizzie A.
Fletcher, Nettie T.	Maxwell, Mary E.	Wentworth, Augusta M.
Fagan, Ella T.	Meeker, Mabel R.	Williams, Grace S.
French, Alice M.	Meyer, Camilla	Whirlow, Nellie B.
Forbes, Annie M.	Moore, Marguerite	Whitman, Stella
Goldstein, Frances T.	Musto, Laura	Wildman, Helena T.
Graham, Lizzie M.	Nachman, Sarah	Wratten, Edith M.
Gilmore, Edith May	O'Meara, Johanna M.	Weir, Minnie E.
Harby, Rosalie J.	O'Neil, Agnes L.	Williamson, Emelie L.
Harris, Mary A.	Oglesby, Emma L.	Wright, Alice E.
Hatch, Jennie T.	Orr, Lizzie A.	Winters, Ellen C.
Hendy, Josie M.	O'Rourke, Rosanna	Whiteby, Caroline F.
Hillman, Jeanette C.	O'Brien, Annie T.	White, Alice J.
Hitchcock, Grace B.	O'Brien, Catherine M.	Woodbridge, Fanny
Hyde, Lucy J.	Parker, Emily C.	Young, Hortense J.
Hadley, Flora E.		

MEDAL PUPILS OF THE GRADUATING CLASS OF THE DEN-  
MAN GRAMMAR SCHOOL, MAY, 1878—THIRTEENTH AWARD.

Lettie Aldrich,	Ella McCarthy,	Annie A. Rourke,
Belle Anderson,	Nellie Moyle,	Laura Pearce,
Katie Batchelder,	Katie Morrell,	Francisca Pinto,
Rebecca Bettelheim,	Nellie V. Moss,	Enriqueta Pinto,
Emma E. Flynn,	May F. Plummer,	Belle Reis,
Charlotte Froomberg,	Minnie E. Price,	Minnie Thorn,
Minnie Lamberton,	Josie M. Purdy,	Esther Simms,
	Mary Mello.	

---

MEDAL PUPILS OF THE GRADUATING CLASS OF THE LINCOLN  
GRAMMAR SCHOOL, MAY, 1878—THIRTEENTH AWARD.

G. F. Beardsley,	W. F. Perkins,	Keizo Koyano,
A. Braverman,	A. Raymond,	Edward H. Leonard,
W. W. Erskine,	M. Solomon,	George Molitor,
H. George,	Gus. Winall,	Toyo S. Nishimaki,
F. T. Ghegan,	Vincent Bellman,	Walter K. Slack,
C. E. Mayo,	Henry Breuer,	Chas. S. Spinney,
J. M. McCloskey,	Joseph B. Joseph,	Yoshida Katsu,
	C. E. Palmer.	

---

MEDAL PUPILS OF THE GRADUATING CLASS OF THE  
BROADWAY GRAMMAR SCHOOL, MAY, 1878—SECOND AWARD.

Fannie Aaron,	Alice M. Gove,	Jennie A. Pickard,
Theresa S. Alvarado,	Mary E. Hutchings,	Edith L. Pope,
Jessie M. Carruthers,	Aggie A. Keene,	Mary A. Ryan,
Bertha L. Collins,	Winnie A. Leary,	Maggie A. Sullivan,
Kittie C. Corbell,	Sarah A. Levy,	Maude Thayer,
Maria G. Douglass,	Zillah G. Millner,	Louise Veiller,
Sophie M. Giacobbi,	Julie L. Murden,	Maggie W. White,
Ellie C. Godkin,	Florence A. Musto,	

## GRADUATES OF GRAMMAR SCHOOLS, MAY, 1878.

## LINCOLN GRAMMAR SCHOOL.

Charles Henry Blohm,	Wm. Fawcette Perkin,	Frank B. Gray,
Alfred Braverman,	Albert Raymond,	Theodore C. Hawkins,
William Albert Colby,	Maximilian Salomon,	Henry Immel,
George Oswald County,	George Burbank Somers,	Keizo Koyano,
Charles Water Crane,	Humphrey B. Sullivan,	Walter S. Mackay,
Wm. Wilson Erskine,	Lincoln Ewart Savage,	How. K. Moulthrop,
Thomas Frances Ghegan,	Gus. Winall,	George Molitor,
Jacob A. Galland,	Frank A. Avery,	Wm. G. Mugan,
Fred. Sammons Ingerson,	Yoshida Katsu,	Geo. J. Myers,
Robert Wolfenten Kenny,	Harry S. Bausman,	Toyo S. Nishimaki.
Harry Clay Klopenstine,	Philip B. Bekeart,	John T. O'Donnell,
Wm. Emory Lindenberger,	Vincent Bellman,	Chas. C. Rountree,
Robert Alex. Marshall,	Allison C. Bonnell,	Oscar Rountree,
Clarence Earle Mayo,	David B. Carn,	Edward W. Smith,
John Joseph Morrissey,	John J. Curry,	Chas. S. Spinney,
John Matt. McCloskey,	Chas. W. French,	Jas. F. Stevens,
Ralph Byron Nickerson,	Joseph H. Goldman,	Jas. A. Watt.

## RINCON GRAMMAR SCHOOL.

Kate Bridgewood,	Blanche Leviele,	Amelia Borkheim,
Edith Booth,	Lillian Linekin,	Katie Burgin,
Minnie Cram,	Janie Lucas,	Jennie Cullen,
Mary Christy,	Julia McCarthy,	May Curry,
Hannah Cohn,	Annie McCone,	Eva Knowles,
Emma Dornin,	Mamie McElwee,	Mary Lynch,
Ida Elmquest,	Annie Newman,	Laura Mitchell,
Mary Flynn,	Mira Perry,	Louise Modry,
Jennie Gallagher,	Julia Stoddard,	Lizzie Moynihan,
Rosa Gallagher,	Mary Taylor,	Mamie McLure,
Frances Grant,	Flora Trussell,	Nellie O'Donnell,
Annie Harris,	Josie Wilson,	Bessie Phillips,
Sarah King,	Hattie Wilson,	Julia Sainsot,
Mary Lafferty,	Mollie Ashton,	Etta West.

## DENMAN GRAMMAR SCHOOL.

Lettie Aldrich,	Priscella Page,	Lizzie B. Jones,
Belle Anderson,	Louise Peltret,	Angela C. Karatar,
Katie Bachelder,	Laura Pearce,	Katie E. Kean,
Alida Beals,	Francisca Pinto,	Emilie E. Lewis,
Idaline Blaikie,	Gussie Reinstein,	Josie Lynch,
Effie Boyer,	Emily Reynolds,	Lizzie Macken,
Carrie Brown,	Belle Reis,	Jennie Magnes,
Laura Brown,	Leah Rosenberg,	Carrie Morse,
Josephine Burke,	Lena Schmidt,	Nellie G. Moss,
Ella Calish,	Florence Washburn,	Celia Milrelsen,
Carrie Chittenden,	Leonore Willey,	Lillie A. Palmer,
Georgie Coffee,	Minnie Wigmore,	M. Katie Paugh,
Ophelia Cohn,	Alice Wright,	Fallie T. Pearce,
Mary Coffin,	Enriqueta Pinto,	May F. Plummer,
Lizzie Cook,	Marion Beckett,	Ray F. Price,
Carrie Doud,	Rebecca H. Bettelheim,	Minnie E. Price,
Abbie Frink,	Clara A. Brockman,	Josie M. Purdy,
Tillie Gelien,	Julia A. Carles,	Agnes Regan,
Lulu Grogan,	Mattie B. Cole,	Laura B. Rice,
Eugenia Haas,	Sophie L. Cohn,	Annie A. Rourke,
Rose Hewitt,	Daisy E. Crowley,	Hattie S. Samuels,
Florence Cutter,	Maggie M. Curran,	Lucy I. Sedgley,
May Hopps,	Jessie L. Dayton,	Ida M. Simpson,
Edith Lapham,	Alice L. Derrick,	Emilie Simms,
Minnie Lamberton,	Percie R. Dillon,	Esther Simms,
Mary Mello,	Fillie V. Dundas,	Minnie F. Thorn,
Ella McCarthy,	Mary I. Finley,	Laura A. Voorman,
Nettie Moyle,	Emma E. Flynn,	Roxanna A. Wesson,
Katie Morrell,	Charlotte Froomberg,	Grace J. Willis,
Minnie Moore,	Carrie A. Hickson,	Rachel Morgenstern.
Mattie Nourse,	Sarah R. Jacobs,	

## SOUTH COSMOPOLITAN GRAMMAR SCHOOL.

Laura Arnheim,	Selma Wolff,	Fred. Patek,
Edith Alexander,	Leonie Friedmann,	George Ritter,
Charlotte Betzell,	Lizzie Givens,	George Rothganger,
Sarah Barman,	Ethel Goewey,	Clement Schuster,
Johanna Blum,	Blanch Harper,	Philip Stahl,



Hattie Cahn,	Mary Hilton,	William Tiedeman,
Sophie Christian,	Clario Hobart,	Alfred Adelsdorfer,
Amelia Cohen,	Ida Lang,	Andrew Armer,
Henrietta Druffel,	Mary Lanfesty,	Walter Cohn,
Rebecca Funkenstein,	Olga Mandelbaum,	Eugene Delmar,
Regina Hertz,	Ellarose Sylvester,	George Elliott,
Katie Huck,	Amy Wangenheim,	Leon Greenebaum,
Clara Heyl,	William Adelsdorfer,	Otto Greenewald,
Rose Levy,	Samuel Dinkelspiel,	Mellville Klauber,
Estelle Levy,	Ferdinand Frohman,	Willie Levinson,
Rebecca Meyerstein,	Berthold Goldsmith,	Frank Michael,
Rose Oppenheimer,	Fred. Hacke,	Edward Putnam,
Alice Rhine,	Edson Halsted,	Louis Rosenthal,
Rosa Romberg,	Albert Happersburger,	Henry Rotschild,
Lenora Silverberg,	Emanuel Heller,	Lucius Solomons,
Anna Staib,	Walter Marwedel,	Charles Weinshenk,
Rosie Stern,	Nathan Mayer,	Monroe Wertheimer,
Martha Straus,	Henry Meyer,	Alphonse Sutter.
Dora Wiebalk,		

## VALENCIA STREET GRAMMAR SCHOOL.

Maggie Clark,	Annie L. Ladd,	Walter N. Brunt,
Grace Ellis,	Jennie A. Mecham,	Edward A. Buck,
Sadie F. Fairfield,	Nellie L. Murtha,	Arthur W. Edwards,
Maggie E. Farrell,	Antoinette M. Pestner,	George W. Hughes,
Carrie E. Lang,	Helen C. Peters,	Chas. E. Mallon,
Minnie B. McPherson,	Mary E. Phillips,	Chas. McDermott,
Mary V. Newman,	Marion S. Thom,	James M. Parker,
Bessie E. Turrell,	Etta L. Tripp,	Marcus P. Sawtelle,
Emily M. Turrell,	Mary O. Williams,	James K. Scott,
Jessie Curtis,	Charles Creighton,	Joseph E. Shea,
Maria M. Doyle,	Richard G. Hillman,	Frank P. Sherman,
Alice C. Greer,	Samuel J. Hutton,	Abe Stone,
Ida L. Hall,	Edward A. Keil,	John E. Whitney,
Annie J. Hopkins,	James A. Philips,	Frederick W. Williams,
Ida E. Hughes,	Samuel F. Booth,	Joseph H. Younger,
Alice T. Kleinclaus,		

## HAYES VALLEY GRAMMAR SCHOOL.

Nellie E. Ahern,	Ella I. Martin,	Tennie Littlebrandt,
Pauline E. Borie,	Carrie M. Mills,	Helen Levi,

Lillie M. Curtis,  
Lizzie G. Crutchley,  
Jessie C. Duncan,  
Nellie R. Gallagher,  
Ella M. Griffith,  
Martha Gross,  
Sallie M. Hoburg,  
Alice Howell,  
Julia Kellogg,  
Cora I. Love,  
Emily J. Locke,  
Bessie McAvity,  
Chrissie McAvity,  
Ruth McClellan,  
Angie A. McCreery,

Mamie Noyes,  
Annie T. Smith,  
Maggie L. Smith,  
Emma L. Tebbets,  
Nellie L. Treat,  
Virginia K. Tyler,  
Marguerite West,  
Annie Woodward,  
Anita Alger,  
Minnie Bourdet,  
Anna Condon,  
Annie Critcher,  
Nellie G. Donovan,  
Lulu Kraus,  
Martha Küner,

Rachel Meyer,  
Ella Morris,  
Anna Poetz,  
Agnes Spatz,  
Sheda Torbert,  
Rodolphus C. Dyer,  
Emil F. Fahrbach,  
Walter T. Lyon,  
Herman Goetjen,  
Eddie Goetjen,  
Robt. La Motte,  
Allie Meyer,  
Willie Martin,  
James O'Kane,  
Frank Savage.

## UNION GRAMMAR SCHOOL.

Hiram A. Graves.

## CLEMENT GRAMMAR SCHOOL.

Kate T. Callahan,  
Mary A. Crittenden,  
Mary Miller,  
Sarah Neustadt,  
Ella F. Walcott,

Clara E. Wynn,  
Alfred J. H. Dheilich,  
Frank M. Fischer,  
Chas. H. Hinchman,  
Frederick G. Redding,

James G. Ruggles,  
Frank W. Thompson,  
John Dill,  
Hattie E. Kullman,  
Carrie Goodman,

## BROADWAY GRAMMAR SCHOOL.

Fannie Aaron,  
Theresa S. Alvarado,  
Jessie M. Carruthers,  
Bertha L. Collins,  
Kittie C. Corbell,  
Maria G. Douglass,  
Sophie M. Giacobbi,  
Ellie C. Godkin,  
Louise R. Hanlon.

Mary E. Hutchings,  
Aggie A. Kean,  
Winnie A. Leary,  
Sarah A. Levy,  
Zillah G. Milner,  
Julie L. Murden,  
Florence A. Musto,  
Jennie A. Pickard,

Edith L. Pope,  
Mary A. Ryan,  
Maggie A. Sullivan,  
Maude Thayer,  
Louise Veiller,  
Maggie W. White,  
Mary E. Ring,  
Alice M. Gove.

## EIGHTH STREET GRAMMAR SCHOOL.

Charles Bollier,	Henry M. Wrede,	Emma O'Neil,
Daniel Harrington,	Charles J. Siebert,	Mamie L. Pacey,
Eddie T. J. Murray,	Emma M. Johnson,	Maggie F. Reardon,
Thomas Wessenburg,	Annie G. McFarland,	Mollie Wolfe.

## MISSION GRAMMAR SCHOOL.

Alice Cove,	Rachel Rosenblum,	Charles Everette,
Annie Downie,	Mattie Sellers,	Everette Eldridge,
Kate Penton,	Kate Thomas,	Wm. Miner,
Lizzie Hyde,	Henry Bloom,	Wm. Savage,
Maude James,	Edgar Dehamater,	Howard Grimm,
Mollie Murphy,	James Descalso,	Chas. Wrede.
Katie O'Brien,	Luke Descalso,	

## WASHINGTON GRAMMAR SCHOOL.

Walter Bruce,	George Kelly,	Thos. McGeough,
David Cohen,	Wm. Lindow,	Frank Stone,
Frank Dunn,	Wm. Martin,	Frank Way,
Fred. Johnson,	Arthur McGeough,	Harry Young.

## SPRING VALLEY GRAMMAR.

Nettie P. Andrew,	Amelia E. Holcombe,	Ella E. Roney,
Sarah E. Bateman,	Ella Kelley,	Leona Sroufe;
Nettie M. Brook,	Hulda A. Krenz,	Robert S. Anderson,
Dora Burtchaell,	Annie L. Loucks,	Fred. W. Bridge,
Minnie L. Dennis,	Florence Maiers,	Wm. H. Bridge,
Alicia A. Duffy,	Ella S. Malcohn,	Frank Carson,
Lizzie T. Harrigan,	Katie H. McMillan,	Simon Corinson.

## GEARY STREET GRAMMAR SCHOOL.

Alice T. Ahern,	Dora C. Landers,	Bertha Simonson,
Hester C. Clark,	Emma McFadden,	Bertha Weil,
Lena Cohen,	Mary E. O'Brien,	Robt. F. Doble,
Alice Hochholzer,	Annie Schwartz,	Geo. J. Duraind.
Nettie A. Horton,		

## NORTH COSMOPOLITAN GRAMMAR SCHOOL.

George H. Barber,	Mary Bootz,	Lillie Laeremans,
Harry Bird,	Daizy Bullock,	Lulu Larrimore,
Joseph Boyd,	Mable Davis,	Maggie Murphy,
Thomas H. Brown,	Katie Duckel,	Sylvia H. Rey,
Willie Chipman,	Ida H. Enquist,	Annie H. Schwartz,
August Demangeon,	Mary H. Fitzpatrick,	Josephine Scott,
William H. Laeremans,	Alice H. Guenin,	Fannie H. Thurber,
Joseph Rosenberg,	Christiana Hahn,	Dora Zahn.
Pauline Altenburg,		

## SOUTH SAN FRANCISCO SCHOOL.

Mary Barret,	Mary Lahaney,	Frank Perata,
Nellie Davis,	Anna Pederson,	John Raymond.
Katie Greene,	Lillian Riper,	

## LIST OF SCHOOLS AND TEACHERS.

## BOYS' HIGH SCHOOL.

Sutter Street, between Gough and Octavia Streets.

W. T. Reid .....	Principal
F. A. Blackburn .....	Teacher of Latin and Greek
Daniel Levy .....	Teacher of French and Grammar
A. T. Winn .....	Teacher of Natural Sciences
Wm. White .....	Teacher of Mathematics

NAME.	RESIDENCE.	NAME.	RESIDENCE.
W. T. Reid .....	18 Sherman street.	J. M. Sibley .....	511 Jones street.
F. A. Blackburn .....	733 Bush street.	E. Knowlton .....	876 Shotwell street.
Daniel Levy .....	617 Green street.	M. L. Templeton .....	1637 Hyde street.
A. T. Winn .....	1717 Larkin street.	C. H. Silliman .....	1914 Broadway street.
Wm. White .....	304 Eighteenth street.		

## GIRLS' HIGH SCHOOL.

Bush Street, between Hyde and Larkin Streets.

John Swett.....	Principal
Mrs. C. R. Beals.....	Vice-Principal
Mrs. D. Clark.....	Vice-Principal
V. Rattan.....	Teacher of Natural Sciences
H. Senger.....	Teacher of Latin and German
Mrs. H. Hochholzer.....	Teacher of French
Mrs. M. W. Kincaid.....	Teacher of Normal Class

NAME.	RESIDENCE.	NAME.	RESIDENCE.
John Swett.....	1419 Taylor street.	Miss C. L. Hunt.....	24 Hawthorne street.
Mrs. C. R. Beals.....	923 Powell street.	Miss J. Smith.....	Lombard and Dupont
Mrs. D. Clark.....	1021 Hayes street.	Miss N. M. Owens.....	1810 Fillmore.
V. Rattan.....	Wash'n & Devisadero.	Miss S. E. Thurton...	1312 Jones street.
H. Senger.....	1621 Washington st.	Mrs. M. L. Hoffmann.	534 Bartlett street.
Mrs. H. Hochholzer...	1520 Geary street.	Miss F. A. Stewart...	1205 Bush street.
Mrs. M. W. Kincaid...	2219 Pacific avenue.	Miss K. Elliott.....	1320 California street.
Miss H. M. Thompson.	123 Turk street.	Miss I. M. Doyle.....	Bush and Central ave.
Miss S. A. Barr.....	1017 Larkin street.	Miss M. L. Soule.....	1515 Jackson street.
Mrs. C. L. Atwood....	1511 Clay street.	Miss G. Smith.....	926 Sacramento street
Miss F. Jewett.....	501 Post street.	Mrs. M. Prag.....	1021 Post street.
Miss M. J. Bragg.....	Beaver and Castro.	Mrs. M. A. Colby....	995 Market street.
Miss M. Wade.....	1507 Washington st.		

## CLEMENT GRAMMAR SCHOOL.

Geary Street, between Jones and Leavenworth Streets.

Mrs. A. E. Du Bois.....	Principal
Miss P. S. Lighte.....	Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. A. E. DuBois....	1512 Hyde street.	Miss J. F. Tennant...	1513 Jackson street
Miss P. S. Lighte....	1512 Hyde street.	Mrs. E. M. North....	2214 Pacific street.
Miss M. E. Callahan...	635 Tyler street	Miss I. Merritt.....	6 Hopeton Terrace.
Miss S. E. Kelly.....	136 Seventh street.	Miss L. S. Corbell....	1020 Washington st.
Mrs. C. K. Waters.....	503 Powell street.	Mrs. A. E. Owen.....	1516 Polk street.
Miss S. H. Earle.....	604 Buchanan street.	Miss E. F. Kraus.....	1031 McAllister street
Mrs. S. H. Bigelow...	15 Taylor street.	Miss L. B. Little.....	5 Liberty street.
Miss D. H. Leppien...	1228 Green street.		

## DENMAN GRAMMAR SCHOOL.

Corner Bush and Taylor Streets.

James Denman ..... Principal

Mrs. E. M. Baumgardner.....Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
James Denman.....	711 Post street.	Miss A. T. Flint.....	812 Hyde street.
Mrs. E. M. Baumgardner	711 Leavenworth st.	Miss M. J. Gallagher..	304 Third street.
Mrs. M. J. Mayborn....	San Pablo ave. Oakl'd	Miss Belle Rankin....	511 Mason street.
Mrs. S. B. Gates.....	Union nr. 8th, Oakl'd	Mrs. S. B. Daniels....	1315 Sacramento st.
Miss Ada Weston.....	126 Tyler street.	Mrs. M. J. Cline.....	2606 Sacramento st.
Miss S. P. Lillie .....	704 Dolores street.	Mrs. Lottie Winn ....	1717 Larkin street.
Miss N. L. Fulton ....	Sutter b. Scott & Dev.	Miss C. R. Putnam, ..	1012 Washington st.
Miss K. B. Childs.....	654 Fourteenth, Oakld	Miss Julia A. Danks..	1228 Mission street.
Mrs. E. M. Sexton.....	816 Twentieth street.		

## LINCOLN GRAMMAR SCHOOL.

Fifth Street, between Market and Mission Streets.

Jas. K. Wilson .....Principal

J. T. Hamilton .....Vice-Principal

W. H. Edwards ..... Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Jas. K. Wilson.....	1821 Pine, nr. Octavia	Miss J. E. Dowling...	1238 Mission street.
J. T. Hamilton .....	843 Mission street.	Mrs. A. B. Anderson..	3044 Sixteenth street.
W. H. Edwards.....	1 15th, Blundell House	Mrs. L. C. James.....	2210 Jackson street.
Miss M. Haswell.....	526 Greenwich street.	Miss M. T. Shea.....	2609 Polk street.
Miss S. A. Rightmire..	918 Harrison street.	Miss M. O'Rourke....	279 Jessie street.
Miss L. N. Randolph..	612 Mason street.	Miss E. L. Cornell ...	Office S. V. W. W.
Mrs. M. E. McKown ..	501 Post street.	Miss R. G. Campbell..	1220 Jackson street.
Mrs. M. L. O'Neal ....	415 Minna street.	Mrs. J. E. Crawford ..	1001 Sutter street.
Miss J. A. Forbes.....	320 Turk street.	Miss F. E. Coleman..	1832 Howard street.
Miss J. Heney .....	621 Fell street.	Mrs. A. C. Palmer ...	771 Mission street.
Miss R. H. Bragg.....	Castro and Beaver.	Mrs. A. L. Trask.....	1008 Twenty-first st.
Miss J. Lande.....	833 Howard street.		

## SOUTH COSMOPOLITAN GRAMMAR SCHOOL.

Eddy Street, between Polk and Van Ness Avenue.

A. Herbst.....	Principal
A. Lyser.....	Vice-Principal
Mrs. L. K. Burke.....	Vice-Principal
Wm. Zimmermann.....	Teacher of German
Jacques London.....	Teacher of French and German
Mrs. C. Lanfranchi.....	Teacher of French
Miss S. Deetken.....	Teacher of German

NAME.	RESIDENCE.	NAME.	RESIDENCE.
A. Herbst.....	615 Jones street.	Miss A. Goldstein....	813 Tyler street.
A. Lyser.....	506 Franklin street.	Miss M. E. Fairchild..	209 Seventh street.
Mrs. L. K. Burke.....	1213 Clay street.	Miss M. Dillon.....	2215 Octavia street.
Miss K. R. O'Leary....	1031 Market street.	Miss C. Jacobs.....	215 Powell street.
Miss N. O'Loughlan...	121 O'Farrell street.	Miss B. Peiser.....	707 Larkin street.
Miss K. F. McColgan...	1809 Ellis street.	Miss B. A. Bicknell...	302 O'Farrell street.
Miss M. I. Crothers...	732 Sixteenth street.	Miss Annette Miley...	1407 Polk street.
Miss H. Phillips.....	439 Eddy street.	Wm. Zimmermann....	429 Geary street.
Miss R. Jacobs.....	215 Powell street.	Jacques London.....	402 Larkin street.
Miss J. O'Brien.....	12 Elgin Park.	Mrs. C. Lanfranchi...	10 Hollis street.
Miss F. M. Shearer...	134 McAllister street.	Miss S. Deetken.....	1513 Larkin street.

## RINCON GRAMMAR SCHOOL.

Silver Street, between Second and Third Streets.

Miss E. A. Cleveland.....	Principal
Miss M. E. Stowell.....	Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss E. A. Cleveland...	228 Capp street.	Miss A. P. Gibbons...	939 Geary street.
Miss M. E. Stowell....	603 Buchanan street.	Miss H. A. Moses...	4½ Elgin Park.
Miss A. C. Robertson...	355 First street.	Mrs. S. N. Joseph...	Clarendon House.
Miss J. B. Brown.....	308 Eighteenth st.	Miss E. F. Bowse....	52 Zoe street.
Miss C. T. Bucknam...	27 Glen Park ave.	Miss M. F. Smith....	666 Harrison street.
Miss A. M. Dore.....	112 Perry street.	Miss S. F. Loughran..	2713 Howard street.
Mrs. H. A. St. John...	11 Pearl street.		



## HAYES VALLEY GRAMMAR SCHOOL.

McAllister Street, between Franklin and Gough Streets.

George Brown.....	Principal
A. J. Itsell.....	Vice-Principal
Mrs. F. E. Reynolds.....	Vice-Principal
I. Leszynsky.....	Teacher of German

NAME.	RESIDENCE.	NAME.	RESIDENCE.
George Brown.....	308 Leavenworth st.	Miss M. I. McNicoll ..	441 Twenty-second st.
A. J. Itsell.....	1832 O'Farrell street.	Mrs. M. Humphrey....	126 Rose avenue.
Mrs. F. E. Reynolds ..	148 Sixth street.	Miss M. M. Rowe.....	1517½ Taylor street.
Miss M. E. Lipman....	1011 Polk street.	Miss Q. O. McConnell	218 Eddy street.
Miss C. A. Templeton..	1637 Hyde street.	Mrs. A. M. Brown....	405 Gough street.
Miss K. O'Brien.....	39 Page street.	Mrs. M. E. Caldwell ..	18 Mission street.
Miss K. McFadden.....	1607 Turk street.	Miss F. Kalisher.....	420 Van Ness ave.
Miss A. M. Huntley....	325 Ellis street.	Miss J. Thyges.....	839 Mission street.
Miss N. A. Littlefield..	2516 Sacramento st.	Mrs. A. H. Bibb.....	21 Stanley Place.
Miss K. E. Gorman ...	148 Sixth street.	I. Leszynsky.....	Windsor House.

## VALENCIA STREET GRAMMAR SCHOOL.

Valencia Street, between Twenty-second and Twenty-third Streets.

S. A. White.....	Principal
L. W. Reed.....	Vice-Principal
Miss A. A. Rowe.....	Vice-Principal
Mrs. E. C. Giffard.....	Teacher of French
Mrs. J. E. Gerichten.....	Teacher of German
L. Michaelson.....	Teacher of German

NAME.	RESIDENCE.	NAME.	RESIDENCE.
S. A. White.....	622 Twenty-third st.	Miss M. E. Casey.....	17 Twenty-second st.
L. W. Reed.....	1213 Jefferson, Oak'd	Miss C. Cohen .....	10 Liberty street.
Miss A. A. Rowe.....	2327 Howard street.	Miss S. C. Sturtevant.	123 Twenty-fourth st.
Miss M. T. Little.....	1831 Jessie street.	Miss M. Boyle.....	2549 Howard street.
Miss J. E. Greer.....	609 Seventeenth street	Mrs. E. C. Marcus ..	535 Post street.
Mrs. S. J. Mann .....	520 Capp street.	Miss E. H. Morrison .	508 Ellis street.
Mrs. M. L. Clery.....	16½ Rausch street.	Mrs. J. B. Sniffen ....	1925 Jessie street.
Miss M. I. Connell....	907 Shotwell street.	Miss M. O'Brien.....	39 Page street.
Miss M. L. Greer .....	609 Seventeenth street	Miss R. J. O'Donnell .	1132 Folsom street .
Miss M. R. Miller.....	1935 Jessie street.	Mrs. E. C. Giffard.....	18th and Dolores.
Mrs. M. E. Matthews..	520 Capp street.	Mrs. J. E. Gerichten..	452½ Tehama street.
Miss E. J. Miller.....	2593 Howard street.	L. Michaelson.....	Mission Rd, op Ind St
Miss E. V. Graham....	14 Liberty street.	Miss F. E. Hawley ...	233 San Jose avenue.

## NORTH COSMOPOLITAN GRAMMAR SCHOOL.

Filbert Street, between Taylor and Jones Streets.

Miss Jean Parker.....Principal  
 Miss R. Levinson.....Vice-Principal  
 Mrs. B. Chapuis.....Teacher of French  
 Dr. J. Wideman.....Teacher of German

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss Jean Parker.....	S.E.cor Wash & Jones	Miss V. E. Smith ....	427 Sutter street.
Miss R. Levinson.....	209 Turk street.	Miss N. M. Storrs....	1630 Eddy street.
Miss M. A. Humphreys	3 Yerba Buena street.	Miss D. W. Tiedemann	1630 Eddy street.
Miss A. T. Campbell...	1220 Jackson street.	Miss E. N. Lindberg...	131 Chestnut street.
Miss H. M. Mullens....	1017 Fourteenth, Oak	Miss Grace Mathieson.	230 Green street.
Miss L. A. Humphreys.	3 Yerba Buena street.	Mrs. B. Chapuis.....	1309 Powell street.
Miss N. E. Hoy.....	1114 Leavenworth st.	Dr. J. Wideman.....	2522 Webster street.
Mrs. H. Wise.....	153 Union street.		

## SPRING VALLEY GRAMMAR SCHOOL.

Broadway Street, near Polk Street.

J. W. Anderson.....Principal  
 Miss J. B. Short.....Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
J. W. Anderson.....	3044 Sixteenth street.	Miss L. M. Banks.....	1419 Washington st.
Miss J. B. Short. ....	228 Capp street.	Miss A. E. Bonnard...	113 Ninth street.
Mrs. H. P. Taylor.....	1409 Bush street.	Miss H. M. Thompson	2213 Fillmore street.
Miss A. C. Gregg.....	1727 Broadway street.	Miss J. M. Boland....	109½ Shipley street.
Mrs. C. E. Gibbs. ....	1205 Polk street.	Miss M. I. Bonnard...	113 Ninth street.
Mrs. M. E. McCarthy ..	2213 Polk street.	Miss V. M. Raclet ....	1224 Dupont street.
Miss M. J. Canham....	1712 Pacific avenue.	Miss J. L. Gibbs.....	149 Ninth street.
Miss A. S. Harrington.	2534 Washington st.		

## BROADWAY GRAMMAR SCHOOL.

Broadway Street, between Powell and Mason Streets.

C. H. Ham.....Principal

Mrs. M. J. Carusi.....Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
C. H. Ham.....	Encinal stat, Alameda	Mrs. M. H. Carrier ...	2012 Taylor street.
Mrs. M. J. Carusi.....	929 Jackson street.	Miss M. Carnes.....	1210 Mason street.
Mrs. C. R. Pechin.....	528 Greenwich street.	Miss L. P. Watson....	24 Scott Place.
Miss F. L. Soule.....	1905 Stockton street.	Miss J. C. Dunphy....	1610½ Hyde street.
Miss A. E. Aiken.....	227 Geary street.	Miss C. L. Sweeney....	723½ Clementina street
Miss C. A. Adams.....	1910 Hyde street.	Miss C. I. Stewart....	1205 Bush street.
Miss N. C. Haswell....	526 Greenwich street.	Mrs. L. Kelly.....	1604 Mason street.

## UNION GRAMMAR SCHOOL.

Union Street, between Kearny and Montgomery Streets.

Chas. F. True.....Principal

Dan Lambert.....Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Chas. F. True.....	165 Ninth street.	Miss E. G. Grant....	1776 Howard street.
Dan. Lambert.....	2437 Buchanan street.	Miss K. Fitzsimmons..	222 Lombard street.
Miss C. Wheaton.....	727 Geary street.	Miss I. Kervan.....	611 Powell street.
Miss N. F. McFarland..	2408 Folsom street.	Miss Sarah E. Miller..	14 Capp street.
Miss A. C. Herndon....	1307½ Polk street.	Miss N. S. Baldwin ...	324 Austin street.
Mrs. E. A. Wilson.....	1642 Polk street.		

## WASHINGTON GRAMMAR SCHOOL.

S. W. corner of Washington and Mason Streets.

Jos. O'Connor.....Principal

Elisha Brooks.....Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Jos. O'Connor.....	1205 Union street.	Miss M. A. Evans....	1109 Green street.
Elisha Brooks.....	1725 Sutter street.	Miss M. A. Weeks....	731 Green street.
T. B. White.....	325 O'Farrell street.	Miss Josie Driscoll....	1114 Sacramento st.
Miss Irene Lamb.....	1502 Taylor street.	Miss M. Hendry.....	314 Brauman street.
Miss M. M. Murphy....	715 Howard street.	Miss M. E. Hurley....	1826 Pacific avenue.
Miss I. Patterson....	1110 Powell street.	Miss Carrie Hastings..	916 Vallejo street.
Miss A. M. D'Arcy....	2 Torrence Place.		

## EIGHTH STREET GRAMMAR SCHOOL.

Eighth Street, between Harrison and Bryant Streets.

Jno. A. Moore.....Principal  
 S. Sturges.....Vice-Principal  
 Miss K. McDonald.....Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Jno. A. Moore.....	1213 Mission street.	Miss J. R. Patton.....	529 Shotwell street.
S. Sturges.....	310 Ninth street.	Miss T. L. Lynch.....	713 Hyde street.
Miss K. McDonald.....	1022 Twentieth street.	Miss E. Donovan.....	118½ Clara street.
A. D. D'Ancona.....	502 Franklin street.	Miss M. H. Slavan.....	568 Seventeenth st.
Miss B. Dixon.....	1109 Shotwell street.	Miss L. Thomas.....	663 Seventeenth st.
Miss L. S. Templeton..	1511 Clay street.	Miss M. A. Harrigan..	129 Twelfth street
Miss L. M. Classen.....	232 Francisco street.	Mrs. E. F. Magee.....	630 Green street.
Miss M. L. Fuller.....	723½ Natoma street.	Miss S. J. Jones.....	109 Eighth street.
Mrs. M. C. Williams...	1923 Jessie street.		

## MISSION GRAMMAR SCHOOL.

Mission Street, between Fifteenth and Sixteenth Streets.

Miss L. T. Fowler.....Principal  
 Miss B. Cox.....Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss L. T. Fowler.....	2445 Howard street.	Miss M. Ray.....	25 Haight street.
Miss B. Cox.....	631½ Geary street.	Miss N. F. Sullivan...	1936 Jessie street.
Miss M. E. Bennett....	Folsom b. 19th & 20th	Mrs. S. F. Neil.....	4 Mitte street.
Miss V. Mitchell.....	614 Eddy street.	Miss J. Forsythe.....	97½ Fifteenth street.
Miss M. O'Connor.....	541 Seventeenth st.	Miss W. E. Smith.....	427 Sutter street.
Miss N. A. Savage.....	2410 Mission street.	Mrs. W. E. Pinney....	Cor. 23d and Bartlett.
Miss M. Sprott.....	1518 Mission street.	Miss M. Deane.....	1124½ Folsom street.

## GEARY STREET GRAMMAR SCHOOL.

Geary Street, between Pierce and Scott Streets.

W. A. Robertson, ..... Principal  
 Mrs. N. A. Wood ..... Vice-Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
W. A. Robertson .....	6 Elliot Park.	Miss L. Pfeiffer .....	218 Eddy street.
Mrs. N. A. Wood .....	2211 Steiner street.	Miss N. Stallman .....	1824 Sutter street.
Miss M. Strange .....	331 Guerrero street.	Mrs. C. M. Sisson .....	1512 Leavenworth st.
Mrs. E. J. Elliott .....	2202 Steiner street.	Miss Lizzie Crowley .....	1427 Howard street.
Miss Ida Strauss .....	1309 Larkin street.	Miss F. Rosenberg .....	120 Gilbert street.
Miss Ella J. Morton .....	1016 Webster street.	Miss C. R. Bunker .....	2123 California street.
Mrs. E. H. Hart .....	941 Howard street.	Jno. Bagnall .....	951 Mission street.
Miss L. Banks .....	1419 Washington st.		

## SOUTH COSMOPOLITAN PRIMARY SCHOOL.

Post Street, between Dupont and Stockton Streets.

Miss M. A. Castelhun ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss M. A. Castelhun .....	Treat av. b 21st & 22d.	Miss M. E. Roberts .....	157 Silver street.
Miss L. C. McNear .....	225 Oak street.	Miss Alice J. Hall .....	518 Jones street.
Miss A. A. Garland .....	1605 Howard street.	Miss L. Wells .....	511 Chestnut street.
Miss S. Wilson .....	1008 Jones street.	Mrs. E. E. Hoyt .....	1210 Polk street.
Miss L. Heineberg .....	332 Tyler street.	Miss Annie Unger .....	726 O'Farrell street.
Miss B. Bunner .....	108 Ellis street.	Miss A. Fittig .....	1619 Powell street.
Mrs. R. Carter .....	458 Clementina st.	Miss K. Bonnell .....	1527 Clay street.
Miss M. A. Lloyd .....	1327 Leavenworth st.		

## MISSION PRIMARY SCHOOL.

Mission Street, between Fifteenth and Sixteenth Streets—Rear of Mission Grammar School.

Miss M. J. Hall ..... Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss M. J. Hall .....	518 Jones street.	Miss G. Gallagher .....	333 Guerrero street.
Miss Annie Day .....	Washington avenue.	Miss R. Jewell .....	1214 Howard street.
Miss V. C. Ruby .....	8 Adair street.	Miss C. L. Morton .....	450 Bartlett street.
Miss J. C. Lundt .....	2104 Mason street.	Miss Minna Robinett .....	728 Sixteenth street.
Miss M. E. Bradbury .....	2027 Mission street.	Miss Nora Sullivan .....	1936 Jessie street.
Miss S. Pendergast .....	2543 Folsom street.	Miss F. Adams .....	586 Buchanan street.
Mrs. E. H. B. Varney .....	121 First avenue.		

## TEHAMA PRIMARY SCHOOL.

Tehama Street, between First and Second Streets.

Mrs. E. A. Wood.....Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. E. A. Wood.....	121 Turk street.	Miss E. Booth.....	512 Shotwell street.
Miss K. Egan.....	16 Oak street.	Mrs. J. Love.....	1714 Clay street.
Miss L. J. Horn.....	14 Oak street.	Miss E. Gallagher ..	333 Guerrero street.
Miss E. White.....	327 First street.	Miss A. Pike.....	313 Taylor street.
Miss L. Donnelly.....	38 Moss street.	Miss L. Brandt.....	929 Pacific street.
Miss J. Ephraim.....	360 Minna street.	Mrs. A. H. Hamill ..	2524 Clay street.
Miss H. A. Grant.....	1401 Powell street.	Miss Luella Hay.....	259 8th st., Oakland.
Miss M. D. Blackstaff..	1227 Green street.	Mrs. J. C. Jones.....	Arcade House.
Miss F. A. Nichols.....	1229 Folsom street.		

## BUSH STREET COSMOPOLITAN PRIMARY SCHOOL.

Bush Street, between Dupont and Stockton Streets.

Mrs. C. F. Plunkett.....Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. C. F. Plunkett....	231 San Jose avenue.	Miss H. M. Hitchcock..	1010 Powell street.
Miss D. Sloss.....	1302 California street.	Miss E. Selling .....	1103 McAllister st.
Miss T. Hermann.....	1812 Fillmore street.	Miss M. V. Buckholtz..	1206 Market street.
Miss F. Hare.....	505 Harrison street.	Miss K. Deane .....	1124½ Folsom street.
Miss P. Raphael.....	510 Eddy street.	Miss V. Coulon .....	913 Natoma street.
Miss S. E. LaGrange ..	914 Pine street.	Mrs. H. Solomons ....	723 Webster street.
Miss T. F. Hess.....	818 Larkin street.	Miss R. Birdsall .....	Brunswick House.
Miss C. T. Maurer.....	Mastic Stat'n, Alameda		

## LINCOLN PRIMARY SCHOOL.

Bryant Street, between Sixth and Seventh Streets.

Miss K. Sullivan.....Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss K. Sullivan.....	419 Minna street.	Miss M. A. Salisbury..	916 Washington st.
Miss A. E. Hucks.....	708 Lombard street.	Miss P. Langstadter...	331 Turk street.
Miss C. Hart.....	1216 Washington st.	Miss M. E. Collins.....	419 Minna street.
Miss F. Stuart.....	916 Washington st.	Mrs. L. Hopkins.....	2328 Mission street.
Mrs. M. Steele .....	330 Eddy street.	Miss M. L. Hart.....	100 McAllister st.
Miss G. Garrison.....	327 Capp street.		



## MARKET STREET PRIMARY SCHOOL.

Fifth Street, near Market—Rear of Lincoln Grammar School.

Miss A. M. Manning.....Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE
Miss A. M. Manning...	Bush and Stockton.	Mrs. C. A. Hartmeyer.	923 Jones street.
Miss M. A. Roper.....	433 Geary street.	Miss M. B. Parker...	1 Geary Place.
Miss J. Gilman.....	603 Buchanan street.	Miss L. E. Prevost...	708 Fell street.
Miss A. L. Hunt.....	59 Tehama street.	Miss L. O'Callahan...	157 Ninth street.
Miss E. S. Anderson...	8 Essex street.	Miss A. F. McDermott.	26 Turk street.
Miss B. A. Kelly.....	824 Mission street.	Miss A. E. Lynch.....	18 Taylor street.
Miss B. Malloy.....	600 Bush street.	Miss S. B. Cooke.....	29 Glen Park avenue.
Miss S. E. Skidmore...	605 Polk street.	Miss L. E. Doyle.....	Central av. b Bush & 1'
Mrs. K. McLaughlen...	519 Ellis street.		

## FOURTH STREET PRIMARY SCHOOL.

Corner of Fourth and Clara Streets.

Miss E. E. Stincen.....Principal

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss E. E. Stincen....	812 Ellis street.	Miss E. Clark ....	Berkeley.
Miss A. F. Sprague....	1907 O'Farrell street.	Miss K. Shepherd...	676 Sycamore, Oakl'd.
Miss M. J. Henderson..	736 Harrison street.	Miss K. Hickey.....	Cor. 28th and Bryant.
Mrs. A. M. Matheson..	Cor. Tenth & Folsom.	Miss E. A. Frontin...	1515 Jackson street.
Miss A. E. Benson.....	2710 Howard street.	Miss M. C. Cady.....	36 Moss street.
Miss H. Levy .....	1157 Mission street.		

## PINE AND LARKIN STREET PRIMARY SCHOOL.

Corner of Pine and Larkin Streets.

Miss H. Cooke.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss H. Cooke.....	1511 Clay street.	Miss P. Parker.....	2222 Jackson street.
Miss F. Cooke .....	2324 Fillmore street.	Miss M. Metcalf.....	111 Franklin street
Miss V. Bradbury....	1511 Clay street.	Miss M. Corkery.....	1903 Polk street.
Miss L. Templeton...	1637 Hyde street.	Miss D. Hyman.....	309 Powell street.
Miss A. Sawyer.....	2039 Howard street.	Miss L. M. Devine....	733 Bush street.
Miss M. Donnelly.....	38 Moss street.	Miss L. T. Ryan.....	1206 Ellis street.
Miss M. Ada Oglesby..	1018 Pine street.		



## GREENWICH STREET PRIMARY SCHOOL.

Greenwich Street, between Jones and Leavenworth Streets.

Mrs. A. S. Trask.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. A. S. Trask.....	622 Greenwich street.	Miss A. E. Gavigan ..	638 Stevenson street.
Miss C. E. Campbell...	743 Howard street.	Mrs. F. V. Davis .....	1517 Eighth, Oakland.
Miss J. C. Evans .....	427 Sutter street.	Miss E. A. Day .....	117 Cedar avenue.
Miss M. T. Giffin.....	1907 Hyde street.	Mrs. Josie Connolly ...	Linden House.
Miss M. H. Smith .....	Lombard and Dupont	Miss B. Goldsmith....	629 Geary street.
Mrs. M. J. C. Crocker..	615 Bush street.	Miss L. Mury.....	14 Page street.
Miss F. A. Stewart.....	1205 Bush street.		

## SILVER STREET PRIMARY SCHOOL.

Silver Street, between Second and Third Streets.

Miss Jennie Smith.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss Jennie Smith ....	Lombard and Dupont.	Miss M. Sleeper.....	222 Shotwell street.
Miss J. A. Doran .....	1206 Market street.	Miss M. E. Crowley ...	Columbia b 23d & 24th
Miss M. Karsky .....	Post street near Scott.	Miss J. Bigley .....	832 Mission street.
Mrs. T. M. Sullivan ...	534 Bush street.	Miss K. F. Hamill ....	2524 Clay street.
Miss P. Hart .....	1216 Washington st.	Miss M. E. Curry .....	278 Minna street.
Miss I. Glennon .....	434½ Tehama street.	Miss K. E. Brady .....	351 Grove street.
Miss R. P. Paul .....	710 California street.	Miss L. S. Maceord ...	236 Ritch street.
Miss E. F. Chase .....	524 Jones street.	Miss J. Lewis .....	26 Rausch street.
Miss J. Hart .....	1216 Washington st.		

## SHOTWELL STREET PRIMARY SCHOOL.

Shotwell Street, between Twenty-second and Twenty-third Streets.

Miss A. A. Hill.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss A. A. Hill.....	608 Fillmore street.	Miss E. L. Ciprico....	2312 Mission street.
Miss D. E. Cronan.....	Nineteenth and Capp.	Miss A. Summerfield..	614 Sutter street.
Mrs. S. A. Miles .....	32 Fourth street.	Miss K. M. Hassen ...	314 Fair Oak street.
Mrs. E. M. Carlisle....	1412 Pine street.	Miss H. L. Wooll.....	1409 Bush street.
Miss M. T. Walsh.....	623 Tyler street.	Miss M. Wagner.....	921 Greenwich street.
Miss E. J. Little.....	Capp and Nineteenth.	Miss E. M. Bodwell...	26th and Bartlett sts.
Miss M. J. Johnson ...	Bay b Stockton & Dup		

## HAYES VALLEY PRIMARY SCHOOL.

Grove Street, near Larkin Street.

Miss P. M. Stowell.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss P. M. Stowell....	603 Buchanan street.	Miss S. J. Boyle.....	1826 Eddy street.
Mrs. C. K. Gaines.....	961 Mission street.	Mrs. L. A. Russell....	Alameda.
Miss F. A. Stowell....	603 Buchanan street.	Miss Anna Smyth.....	464 Clementina st.
Mrs. M. Dwyer.....	1503 Tyler street.	Mrs. K. A. Gamble....	1109 Pacific street.
Mrs. L. E. Worth.....	317 Stockton street.	Mrs. L. Marchant.....	San Rafael.
Miss M. J. Fagan.....	110 Jones street.	Miss E. K. Goggin....	626 Twenty-third st.

## EIGHTH STREET PRIMARY SCHOOL.

Eighth Street, between Harrison and Bryant Streets.

Miss A. E. Slavan.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss A. E. Slavan....	568 Seventeenth st.	Miss R. Mayers.....	3031 Sixteenth street.
Miss M. E. Moroney...	1710 Bush street.	Miss K. Zwicker.....	546½ Natoma street.
Miss C. M. Johnson...	1 Fifth street.	Miss C. A. Glidden...	22d b Shotwell & Fol.
Miss M. A. Ahern.....	213 Larkin street.	Miss M. Varney.....	121 First avenue.
Mrs. A. E. Wright....	Belmont House.	Miss M. L. Crowley....	1427 Howard street.
Miss A. J. Roche.....	417 Eddy street.	Miss K. M. Fuller....	318 Taylor street.
Miss M. Duraind.....	1608 Polk street.		

## TURK STREET PRIMARY SCHOOL.

Turk Street, between Webster and Fillmore Streets.

Mrs. G. Washburn.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. G. Washburn....	323 Austin street.	Miss R. A. Thompson..	2213 Fillmore street.
Mrs. S. H. Summers..	715 Howard street.	Miss J. Hochheimer..	1526 Clay street.
Miss S. R. Thompson..	2203 Larkin street.	Miss L. S. Heney.....	621 Fell street.
Miss D. S. Prescott....	706 California street.	Miss A. E. Hutton....	626 Shotwell street.
Miss F. Peiser.....	11 Sixth street.	Mrs. C. O. Young.....	522 Van Ness avenue.
Miss M. F. Taylor.....	426 Sutter street.	Miss L. M. Barrows....	1321 Tyler street.
Miss T. C. Stohr.....	837 Tyler street.		

## POTRERO SCHOOL.

Corner of Kentucky and Napa Streets.

W. W. Stone ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
W. W. Stone .....	Potrero.	Miss Ida E. Coles.....	228½ O'Farrell street.
Miss K. Ellis .....	Tennessee and Sierra.	Mrs. E. M. Poole .....	115 Seventh street.
Miss M. Fay .....	2014 Dupont street.	Miss A. M. Prescott ..	706 California street.
Miss S. Hawes .....	Napa street.	Miss K. F. Casey.....	1901 Polk street.
Miss Annie Kean.....	7 Meacham Place.		

## MARKET AND SEVENTH STREET PRIMARY SCHOOL.

Miss A. M. Stincen ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss A. M. Stincen.....	Hyde and Chestn ut.	Mrs. E. B. Jones.....	8th, bt Grove & Castro
Miss C. A. Menges.....	326 Jessie street.	Miss A. Weed.....	1217 Leavenworth st.
Mrs. C. E. Danielwitz..	2312 Mission street.	Miss G. F. Libby.....	1505½ Steiner street.
Miss M. C. Barry .....	211 Taylor street.	Mrs. C. L. Hamilton..	3 Ewer Place.
Miss C. B. Earle.....	2416 Sacramento st.	Miss A. J. Dudley ....	1078 Union street.
Miss M. A. Hassett ....	13 Rausch street.	Miss G. C. Morse.....	1205 Polk street.
Mrs. A. A. Bacon.....	1007 Tyler street.		

## POWELL STREET PRIMARY SCHOOL.

Powell Street, between Jackson and Washington Streets.

Mrs. C. J. Gummer ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. C. J. Gummer....	1514 California street.	Mrs. F. W. Collins....	101 Tyler street.
Miss M. C. Robertson..	2 Chelsea Place.	Mrs. E. S. Forester..	921 Jackson street.
Mrs. M. Solomon.....	1620 Clay street.	Miss L. J. Manken....	131 Ellis street.
Mrs. H. V. Shipley ....	1502 Powell street.	Mrs. J. D. Wheeler...	134 Greenwich street.
Miss S. F. Featherly..	913 Valjejo street.		

## BROADWAY PRIMARY SCHOOL.

Broadway Street, between Kearny and Montgomery Streets.

Miss Carrie B. Barlow.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss Carrie B. Barlow..	1312 Jones street.*	Miss S. E. Boucher...	550 Stevenson street.
Miss M. E. Doran.....	916 Pacific street.	Miss R. Goldsmith....	629 Geary street.
Miss Nellie Murphy....	113 Francisco street.	Miss E. Cooney.....	291 Union street.
Miss E. L. McElroy....	Gough and Union sts.	Miss F. L. Stark.....	Haywards.

## UNION PRIMARY SCHOOL.

N. W. Corner Filbert and Kearny Streets.

Mrs. A. Griffith.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. A. Griffith.....	824 Lombard street.	Miss P. Robbins.....	1838 Ellis street.
Mrs. M. Wright.....	1409 Bush street.	Miss A. Cherry.....	32 John street.
Miss H. Featherly.....	913 Vallejo street.	Miss H. Shuck.....	1401 Powell street.
Miss L. Burke.....	1321 Jones street.	Mrs. C. A. B. Smythe.	1423 Kearny street.
Miss A. H. Hanson....	307 Green street.		

## FAIRMOUNT SCHOOL.

Chenery Street, near Randall Street.

Miss Harriet M. Fairchild....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss Harriet M. Fairchild	501 Geary street.	Miss M. E. Hanlon....	11 South Park.
Mrs. A. H. Green.....	225 Bartlett street.	Miss M. A. Houston..	4 Calhoun street.
Miss H. E. Peck.....	24th, near Valencia.	Miss Sophia Kraus...	1031 McAllister street.
Miss S. B. Jenkins....	613 Turk street.	Miss A. B. Hinton....	647 Folsom street.
Mrs. L. M. Covington..	1056 Poplar, Oakland.		

## REPORT OF THE SUPERINTENDENT

## SOUTH SAN FRANCISCO SCHOOL.

Fourteenth Avenue, near L Street.

W. J. Gorman.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
W. J. Gorman.....	132 Sixth street.	Mrs. E. Bonelli.....	1713 Howard street.
Miss M. A. Matthews ..	419 Tehama street.	Miss M. C. Still.....	1509 Steiner street.
Miss M. V. McGeough....	908 Sansome street.	Miss M. L. Belding ...	2 Bond street.
Miss M. F. Hollson ....	416½ Natoma street.	Miss B. Garness .....	724 Fourth street.
Miss J. B. Gorman.....	945 Howard street.	Miss G. Perry .....	Tennessee st, nr Butte

## COLUMBIA STREET PRIMARY SCHOOL.

Columbia Street, between Twenty-fifth and Twenty-sixth Streets.

Mrs. M. Deane.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. M. Deane .....	1124½ Folsom street.	Mrs. L. J. Fryer.....	1003 Capp street.
Miss L. M. Knowlton ..	2 Hoff avenue.	Miss M. Robinett. ....	728 Sixteenth street.
Miss N. G. Sullivan.....	1936 Jessie street.	Miss M. E. Miller.....	1935 Jessie street.
Miss I. R. Mallory.....	1 Fifth street.	Miss E. F. Gracier....	730 Shotwell street.
Miss A. S. Jewett.....	1827 Jessie street.	Miss A. J. Gracier.....	730 Shotwell street.
Mrs. C. J. Bigelow.....	228 Shotwell street.	Miss A. McLaughlin..	1010 Mission street.
Miss L. E. Fennell.....	136 First avenue.		

## TYLER STREET PRIMARY SCHOOL.

Tyler Street, between Pierce and Scott Streets.

Miss E. Cushing.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss E. Cushing.....	1612 Turk street.	Miss A. McNamara ...	1637 Mission street.
Miss M. Wiseman.....	123 Twelfth street.	Miss M. Ames.....	218 Eddy street.
Miss E. Stone .....	12th and Bdwy, Oakld	Mrs. F. E. Baker.....	1527 Tyler street.
Miss N. Selling.....	1103 McAllister street.	Mrs. A. E. Tierman....	15th and Howard sts.
Miss M. A. Hatman....	Un'n, bt Frank & Go'h		

## SPRING VALLEY PRIMARY SCHOOL.

Union Street, near Franklin Street.

Miss J. M. A. Hurley ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss J. M. A. Hurley ..	1916 Pacific avenue.	Miss J. E. Baldwin ...	2215 Fillmore street.
Miss M. E. Carson. ....	1520 Broadway street.	Miss N. H. Anderson.	2127 Bush street.
Miss B. C. Bannan. ....	2012 Pierce street.		

## NOE AND TEMPLE STREET PRIMARY SCHOOL.

Corner of Noe and Temple Streets.

Mrs. E. Foster ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. E. Foster.....	Cor Valencia and 23d.	Miss E. J. McGreevy..	509 Twenty-second st.
Miss I. C. Emmons ....	937 Twenty-first street	Miss Ida Bernard.....	1515 Hyde street.
Miss M. Simon .....	1204 Mission street.		

## LAGUNA HONDA SCHOOL.

Eighth Avenue, near R Avenue.

James Dwyer ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
James Dwyer .....	1503 Tyler street.	Miss E. D. Eaton.....	2247½ Mission street.

## JACKSON STREET PRIMARY SCHOOL.

Jackson Street, between Webster and Fillmore Streets.

Mrs. M. B. Moore.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. M. B. Moore.....	205 Hyde street.	Miss B. M. Stanford ..	2401 Buchanan street.
Mrs. M. A. McKibben..	Cor Filbert and Lyons	Miss M. Bannan .....	2012 Pierce street.

## WEST END SCHOOL.

San Jose Road, near the Six-Mile House.

B. L. Brown.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
B. L. Brown.....	1119 Sutter street.	Miss M. E. Traynor...	2103 Webster street.

## CASTRO STREET PRIMARY SCHOOL.

Castro Street, between Eighteenth and Nineteenth Streets.

Mrs. F. A. Banning.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. F. A. Banning....	2115 Howard street.	Miss I. Gallagher.....	333 Guerrero street.
Mrs. M. E. Moore.....	410 Battery street.		



## OCEAN HOUSE SCHOOL.

San Miguel Road, near the Ocean House Road.

W. F. Gibson ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
W. F. Gibson.....	Cor 23d and Mission.	Miss A. E. Pratt.....	951 Mission street.

## POINT LOBOS SCHOOL.

Nineteenth Avenue, near Point Lobos Avenue.

H. C. Wilson..... Principal.

NAME.	RESIDENCE.
H. C. Wilson.....	.....17 Ellis street.

## BERNAL HEIGHTS SCHOOL.

Cortland Avenue, between Laurel Avenue and Moultrie Streets.

Mrs. M. W. Phelps ..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. M. W. Phelps.....	66 Nevada Block.	Miss K. F. Nagle. ....	2221 Pacific avenue.

## SAN BRUNO SCHOOL.

San Bruno Road, near Serpentine Avenue.

Miss Eva Ciprico..... Principal,

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss Eva Ciprico .....	2312 Mission street.	Miss M. Moynihan....	410 Sixth street.

## SOUTH END SCHOOL.

William Street, near Henry Street.

Philip Prior..... Principal.

NAME.	RESIDENCE.
Philip Prior.....	N. W. cor. Twenty-third and Guerrero streets

## LOBOS AVENUE SCHOOL.

Point Lobos Avenue, near Parker Avenue.

Miss E. Goldsmith..... Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss E. Goldsmith....	629 Geary street.	Mrs. T. Oldham .....	1216 Laguna street.

## UNGRADED SCHOOL.

Harrison Street, between Tenth and Eleventh Streets.

H. C. Kinne.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
H. C. Kinne.....	736 Market street.	M. C. Brophy.....	2600 Mission street.

## LOMBARD STREET PRIMARY SCHOOL.

Lombard, between Baker and Broderick Streets.

Miss A. B. Chalmers.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Miss A. B. Chalmers...	2124 California street.	Miss G. N. Taylor ....	1409 Bush street.

## FLORIDA STREET PRIMARY SCHOOL.

Florida Street, near Eighteenth Street.

Mrs. E. S. Code.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Mrs. E. S. Code. ....	203 Treat avenue.	Miss Cora Gallagher ..	231 First street.
Miss Anna Stovall.....	210 Eddy street.		

## LINCOLN EVENING SCHOOL.

Fifth Street, between Market and Mission Streets.

Jos. O'Connor.....Principal.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
Jos. O'Connor.....	1205 Union street.	A. E. Castle.....	421 Clay street.
F. J. Heney.....	621 Fell street.	H. P. Carlton .....	508 Clay street.
Jno. Bagnall .....	951 Mission street.	P. Prior .....	Cor 23d and Guerrero
J. A. Hecht .....	410 Tehama street.	T. B. White.....	325 O'Farrell street.
G. Schoof .....	513 Franklin street.	A. G. Brown.....	607 Pine street.
H. Hochholzer .....	1520 Geary street.	R. P. Davidson.....	Cor. Post and Mason.
Mrs. J. D. Cooper .....	49 Tehama street.	A. C. Bloomer.....	1031 Market street.
Mrs. T. Chalmers.....	527 Twenty-second st.	O. T. Harvey.....	1210 Union street.
I. Leszynsky.....	Cor Fifth and Market.	J. London.....	402 Larkin street.
J. D. Blackman, .....	Cal. ave, nr 28th st.		

## WASHINGTON EVENING SCHOOL.

S. W. Corner Washington and Mason Streets.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
J. A. Chesnutwood....	731 Pine street.	Miss M. E. Collins ....	419 Minna street.
J. J. Connolly.....	212 Sixth street.	J. P. C. Allsopp .....	502 Valencia street.

## MISSION EVENING SCHOOL.

Mission Street, between Fifteenth and Sixteenth Streets.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
D. J. Delay. ....	1936 Mission street.	D. J. Sullivan.....	1936 Mission street.

## NOE AND TEMPLE STREET, EVENING SCHOOL.

Corner Noe and Temple Streets.

NAME.	RESIDENCE.
W. C. Crook.....	.....Clipper street, near Noe.

## MUSIC TEACHERS.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
W. Elliot.....	308 Leavenworth st.	Miss H. Summerfield..	418 Sutter street.
W. D. Murphy.....	121 Page street.	Miss M. Withrow.....	San Jose av and 24th.
W. E. Price.....	917 Market street.	Miss A. I. Block.....	1113 Leavenworth st.
Miss L. E. Ryder.....	Galt House, Market st		

## DRAWING TEACHERS.

NAME.	RESIDENCE.	NAME.	RESIDENCE.
H. Burgess.....	West Oakland.	Mrs. M. E. Stovall....	210 Eddy street.
G. Schoof.....	513 Franklin street.	Miss E. B. Barnes ....	Shotwell bt 16th & 17th

**OBITUARY.**

---

**JENNIE L. MADDEN**

---

Died April 1, 1878, aged twenty years—a young girl just blooming into perfect womanhood,—the future rich with all the promise which youth, beauty and bright hopes could give; school days but just exchanged for the commencement of life's real duties; duties so conscientiously and earnestly performed, that character could not but deepen and strengthen, ripening rapidly for that perfect garden of souls in which it was so soon to blossom. A rare combination of a gentle, patient spirit united with unusual truth, enthusiasm and energy. Her memory will be a sunny spot, a tender, happy thought to all who knew her.

With life all before her, the mountain yet unclimbed, she is saved the turmoil, struggle and heat of the day, and lifted into eternal peace and rest—has left the cross to wear the crown.

“In small proportions we just beauties see,  
And in short numbers life may perfect be.”

**OBITUARY.**

---

**MISS E. A. SHAW**

---

Taught in Denman, Lincoln and Tyler Street Schools in primary classes for various lengths of time. Her longest term was one of four years in the Tehama Street Primary School. She died in June, 1878. Mrs. Wood, her last Principal, says of her: "I found her faithful and particularly successful in teaching little children." May we all merit as high praise.

A. L. MANN.



**OBITUARY.**

---

**ERVIN DECIUS HUMPHREY**

---

Son of Huron E. and Sybil S. Humphrey, was born in Trumbull, Ashtabula county, Ohio, on the 4th day of August, 1835. His parents were from Connecticut, and settled in Ashtabula, as early as 1828. His mother was a Swett. His father was a farmer, but also a member of the bar and practiced law in all the Courts of the State. Ervin was the fourth child—there being two daughters and five sons—and was brought up on the farm where he learned to be industrious and frugal. His early education was obtained in a country school during the winter months. At the age of sixteen he entered Oswell Academy, Mr. Tucker, Principal, and took the charge of two of his youngest brothers for a few terms, when he went out to teach to make money to enable him to continue his education. After teaching one year, he returned to the Academy again, but for want of means he was unable to remain and graduate. He entered upon the profession of teaching, which he dearly loved and which seemed to be his true element.

He was married to Miss Mary Goodfellow on the 11th day of September, 1861, and the following year he moved to California and farmed in Solano county during the next three years. On the 20th day of July, 1865, he entered the California State Normal School, where he remained one year and graduated with honor to himself and credit to his teachers. He had been connected with the evening schools of this city as a teacher, and he was also connected with a

paper route for the *Morning Call*—thus he supported his family while he was attending the Normal School.

Mr. George W. Minns, who was Principal of the school at that time, wrote as follows: "I consider him [speaking of Mr. Humphrey] faithful, diligent and conscientious in the discharge of every duty devolving upon him—as one who was solicitous to improve every moment of his time, and who has labored early and late to prepare himself to be a professional teacher."

After graduating with the Class of '66, he was elected Principal of Fairmount School in June, 1866, and in June, 1867, he was elected Principal of Mission Grammar School, where he remained until July, 1871, when his school was transferred to the Hayes Valley Grammar, where he remained as Principal until January, 1877, when he resigned his position on account of ill-health. In consideration of his faithful services, his resignation was not accepted by the Board of Education, but he was granted an indefinite leave of absence. He went back to Ohio in June of that year, to visit his birthplace and take his last farewell of those whom he dearly loved. His father and mother and all his brothers and sisters are still living. He returned to his own home and family in this city in February last, where he remained, meeting his friends who were so kind and good to him and with whom he conversed freely about school matters to within a short time before his death, which occurred on the 18th day of March, 1878. He left a wife and three sons in comfortable circumstances. He said to me, the day before he died, that he resigned his soul to its Maker and his sons to their country, as he knew that they were good and faithful children.

JNO. A. MOORE,

Principal Eighth Street Grammar School.



## OBITUARY.

---

MISS EMILY F. SWAN

---

Teacher of the Fourth Grade Class, in Columbia Street School, died of brain fever February 19, 1878.

This estimable young lady had to be known to be appreciated. To a highly cultured intellect and rare musical ability were added a cheerful, unassuming and ladylike demeanor and a careful, thorough, conscientious manner in the performance of every duty. Her death made a void in the hearts of her friends that cannot soon be filled.

MRS. M. DEANE,  
Principal Columbia Street School.





